STATE OF MICHIGAN DEPARTMENT OF NATURAL RESOURCES OFFICE OF THE DIRECTOR

In the matter of administrative proceedings) involving the ROUGE STEEL COMPANY, a) corporation organized under the laws of the) State of Michigan and doing business at 3001) Miller Road in the City of Dearborn, County) of Wayne, State of Michigan.)

SIP No. 30-1993 Revised: 9/9/94

STIPULATION FOR ENTRY OF FINAL ORDER BY CONSENT

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This proceeding results from provisions of the Federal Clean Air Act ("CAA"), 42 U.S.C. Section 7401 <u>et seq</u>., as amended by the Clean Air Act Amendments of 1990, P.L. No. 101-549, 104 Stat. 2399 (Nov. 15, 1990), that designate a portion of Wayne County as non-attainment for PM-10 (particulate matter less than 10 micrometers) and require a State Implementation Plan ("SIP"), based on legally enforceable control measures, that provides for a demonstration of attainment and maintenance of the primary National Ambient Air Quality Standard ("NAAQS") for PM-10 in Wayne County. Further, pursuant to Section 15 of the Michigan Air Pollution Act, 1965 PA 348, as amended ("Act 348"), companies in the standard industrial classifications listed in 15(1), and which are located in areas listed in Table 36 of R 336.1371 of the Michigan administrative code, are required to develop and implement an approved fugitive dust control operating program and to have the program embodied in a legally enforceable order or as part of an approved permit to install or operate.

The Rouge Steel Company ("Company") owns and operates the Rouge Steel Plant ("Plant"), which is a steel manufacturing facility, located at 3001 Miller Road, City of Dearborn, County of Wayne, State of Michigan. The Michigan Department of Natural Resources ("MDNR") alleges that the Plant is a significant source of fugitive dust and particulate emissions which contribute to the non-attainment problem. Further, the requirements for the control of fugitive dust, set forth in Section 15 of Act 348, apply to the Plant.

The Company and the MDNR stipulate as follows:

The Air Pollution Act, 1965 PA 348, as amended, ("Act 348"), MCL
336.11 <u>et seq</u>; MSA 14.58(1) <u>et seq</u> is an act to control air pollution in this state.

2. The Director of the MDNR ("Director") is authorized pursuant to Section 5 of Act 348 to administer and enforce all provisions of Act 348.

3. The Director has delegated authority to the Air Quality Division ("AQD Chief") to enter into the Consent Order.

4. The resolution of this matter by a Consent Order pursuant to Section 16c of Act 348 is proper and acceptable.

5. This Consent Order becomes effective on the date of execution ("effective date of this Consent Order") by the AQD Chief.

6. The emissions of fugitive dust from the Plant are subject to the opacity limitations and prohibitions contained in Sections 15 and 15a of Act 348. The particulate matter and fugitive dust emissions from the Plant must not cause or contribute to a violation of the PM-10 NAAQS. Further, the CAA and Act 348 require the application of all reasonably available control measures ("RACM") for the control of PM-10 emissions.

7. The signing of this Consent Order does not constitute an admission by the Company that the law has been violated. This Consent Order is designed to ensure attainment and maintenance of the PM-10 NAAQS, compliance with Sections 15 and 15a of Act 348, and compliance with the RACM requirements of the CAA and Act 348.

COMPLIANCE PROGRAM AND EMISSION LIMITATIONS

8. On and after the effective date of this Consent Order, the Company shall fully comply with the provisions and requirements of the fugitive dust control operating program and Recordkeeping for Fugitive Dust Sources Addendum, and the particulate emission control program, which are attached as Exhibits A and B, respectively, incorporated by reference, and made an enforceable part of this Consent Order.

RECORDKEEPING AND REPORTING

9. On and after the effective date of this Consent Order, the Company shall keep records as specified in Exhibit A and Exhibit B.

10. On and after the effective date of this Consent Order, the records required pursuant to this Consent Order shall be kept on file at the Company for a period of at least two (2) years, and shall be made available to MDNR upon written or verbal request.

11. Beginning with the calendar quarter starting after the effective date of this Consent Order, and quarterly thereafter, the Company shall submit to MDNR a report identifying each day in which any emission limit, operational requirement, or recordkeeping requirement, as specified in Exhibits A, B, C, or D, was not met. This report shall, for each instance, explain the reason that the emission limit, operational requirement, or recordkeeping requirement was not met, the duration of the event, the remedial action taken, and a description of the steps which were taken to prevent a recurrence. These reports shall be submitted within 30 days following the end of the calendar quarter in which the data were collected.

GENERAL PROVISIONS

12. Upon entry, this Consent Order, along with other supporting documentation required by the United States Environmental Protection Agency ("U.S.EPA"), shall be submitted to the U.S.EPA for approval as a revision to the Michigan SIP in accordance with Part D, Section 171 <u>et seq.</u>, of the Federal Clean Air Act, as amended by Section 105 of the Clean Air Act Amendments of 1990. This Consent Order shall become effective immediately upon entry, except that this Consent Order shall have no effect on the federally-approved SIP unless and until the submitted SIP revision request is formally approved by the U.S.EPA.

13. Upon entry of this Consent Order, the Company may change it's processes, modify the fugitive dust control program contained in Exhibit A, or modify the particulate emission control program contained in Exhibit B ("Control Programs"), in accordance with the following:

A. <u>Process Change</u>

- (1) The Company may change it's operations or processes which are sources of particulate and fugitive dust provided all of the following conditions are met:
 - (a) The provisions of the Control Programs continue to apply to the subject operation or process;
 - (b) The change does not result in an increase in the level

of fugitive dust or particulate emissions;

- (c) The change is approved.
- (2) The Company shall submit to MDNR a written description of the proposed change and how it meets the requirements of 13(A)(1).
- (3) The MDNR shall approve or disapprove the proposed change, in writing, within 45 days from receiving a proposed change which meets the requirements of 13(A)(1).
- (4) Should the MDNR disapprove the proposed change, the disapproval must describe the specific reasons for the decision and must be forwarded to the Company.

B. <u>Control Program Revision</u>

- The Company may revise the Control Programs provided both of the following conditions are met:
 - (a) The Company demonstrates*, in writing, that the proposed revision does not result in an increase in the level of fugitive dust or particulate emissions and submits the demonstration to the MDNR for approval.
 - (b) The revision is approved.
- (2) The MDNR shall approve or disapprove the proposed revision, in writing, within 45 days from receiving a proposed revision using an applicable U.S.EPA approved method to demonstrate the proposed revision meets the requirements of 13(B)(1).
- (3) Should the MDNR disapprove the proposed revision, the disapproval must describe the specific reasons for the decision and must be forwarded to the Company.

C. U.S.EPA Notification

Upon approval of a change pursuant to subsection A above, or a substitution of a control measure pursuant to subsection B above, MDNR shall notify U.S.EPA, in writing, of the revised provisions which are enforceable for the facility.

D. Minor Modification

Upon adoption by the MDNR, and upon approval by U.S.EPA, of operating permit rules to implement the Permit Modification provisions recited at 40 CFR 70.7 (e), the Company may modify a fugitive dust or particulate emission source referred to in this Consent Order according to the terms and conditions contained in the operating permit rules.

E. <u>Minor Modification Approval</u>

Upon MDNR approval of a minor modification pursuant to subsection D above, the MDNR shall submit the approved minor modification to U.S.EPA as a proposed revision to the Michigan SIP.

F. Other Applicable Requirements

Any process change, control program revision, or minor modification made pursuant to this Paragraph does not affect the company's obligation to obtain a permit to install or operate required by Federal law or regulation, or contained in Part 2 of the Air Pollution Control ("APC") Rules and any other applicable requirement contained in the APC Rules or Act 348. * - Demonstrations made pursuant to 13(B)(1)(a) involving chemical dust suppressant applications on unpaved roads shall be made using only petroleum resins, asphalt emulsions, or acrylic cements unless otherwise explicitly provided for by the applicable U.S.EPA approved SIP or U.S.EPA approved method.

14. This abatement program is not a variance subject to the 12 month limitation specified in Section 22 of the Air Pollution Act, being MCLA 336.32.

15. The provisions of this Consent Order shall be binding on the parties to this action, their officers, servants, employees, and attorneys, and on those persons in active concert or participation with them who receive actual notice of this Consent Order. In the event the Rouge Steel Company sells or transfers the Rouge Steel Company, it shall advise any purchaser or transferee of the existence of this Consent Order in connection with such sale or transfer. Within 30 calendar days, the Rouge Steel Company shall also notify MDNR Staff, in writing of such sale or transfer, the identity and address of any purchaser or transferee, and confirm the fact that notice of this Consent Order has been given to the purchaser or transferee. The purchaser must provide written agreement, to the Company, to assume the compliance responsibilities of the Consent Order and provide a copy of the agreement to the MDNR Staff.

16. Pursuant to the requirements of Section 5h of Act 348, the public was notified of a 30-day public comment period on this Consent Order which began on March 1, 1993 and a public hearing on this Consent Order which was held on March 30, 1993.

17. Section 16e of Act 348 may serve as a source of authority but not a

limitation under which this Consent Order may be enforced. Further, the Michigan Environmental Protection Act ("MEPA"), 1970 PA 127, MCLA 691.1201 et seq; MSA 14.528(201) et seq; and all other applicable laws may be used to enforce this Consent Order.

I, the undersigned, who is signing this Stipulation and Order for the Company, certify that I am fully authorized by the Company to enter into this Consent Order and to execute and legally bind the Company to it.

Approved as to Form and Content:

ROUGE STEEL COMPANY nis. By: 10/11 Dated:

The above signatory subscribed and sworn to before me this $\mu \mu$ day of $\mu \mu \mu$, 1994.

Notary Public

MARY E. WATSON Notary Public, Wayne County, Mi My Commission Expires May 28, 1996

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SIP No. 30-1993 (Revised 9/9/94)

Approved as to Content:

Dennis M. Drake, Acting AIR QUALITY DIVISION Chief

AIR QUALITY DIVISION DEPARTMENT OF NATURAL RESOURCES

0/12/94 Dated:

Approved as to Form:

Michael Leffler

Assistant Attorney General, in Charge NATURAL RESOURCES DIVISION DEPARTMENT OF ATTORNEY GENERAL

101 1,194 Dated:

FINAL ORDER

The Chief of the Air Quality Division having had opportunity to review the Consent Order and having been delegated authority to enter into Consent Orders by the Director of the Michigan Department of Natural Resources pursuant to the provisions of the Air Pollution Control Act;

IT IS ORDERED that this Consent Order is approved and shall be entered in the record of the MDNR as a Final Order.

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Dennis M. Drake, Acting Chief

Air Quality Division

10/12/94 Dated:

EXHIBIT A FUGITIVE DUST CONTROL PLAN ROUGE STEEL COMPANY - ROUGE AREA OPERATIONS

1. Facility Name and Address:

Rouge Steel Company 3001 Miller Road Dearborn, MI 48121

2. Name and Address of Responsible Person:

Environmental Engineer, Air Pollution Control Rouge Steel Company Environmental Engineering Rouge Office Building, Room 2110 3001 Miller Road Dearborn, MI 48121 Phone: (313) 323-1260

Summary of Source Descriptions and Control Measures:

3. Diagram:

See attached Exhibit I and Exhibit II.

4. Location of Unloading Operations:

See attached Exhibit I.

- 5. Description of Practices:
 - A. Operations using pollution control equipment:
 - 1) The lime receiving station at the Basic Oxygen Furnace is located at the southeast corner of the building. Burnt lime is received in enclosed trucks which are unloaded inside of a building. The building is evacuated using a cyclone dust collector. Collected material is returned to the lime hopper inside the building.
 - 2) The lime storage silo at the Electric Arc Furnace is located at the east end of the building. Burnt lime is received in enclosed trucks which are unloaded pneumatically. The silo is evacuated through a bin vent filter. Collected material is returned to the storage silo.
 - 3) Raw materials, such as taconite pellets, iron ores, limestone, and coal, are received at the dock in large boats. The boats are equipped with conveyors which provide self-unloading capability. The head end of the conveyor on each boat shall minimize the drop height to two feet, where possible, during unloading of the raw materials into the Hi-Line storage bins.

- B. Operations involving materials collected by pollution control equipment.
 - The coke screening building (DD Building) is located west of "Dx" Battery and east of the Hi-Line. The building is evacuated through a baghouse. Material collected is accumulated in the coke breeze storage bin, and subsequently sold.
 - 2) The coal mixing building (FF Building) is located west of "C" Battery and east of the Hi-Line. The building is evacuated through a baghouse. Material collected is returned to the coal conveyor within FF Building.
 - 3) Coke conveyor number 10/number 11 junction is located between DD Building and the Hi-Line. The area is evacuated using a cyclone cleaner. The collected material is deposited in a three-sided enclosure. The material is approximately 5% silt. Removal is accomplished using a front-end loader and truck. The material is mixed with other coke breeze and sold.
 - 4) Two of three coke pushing emission control systems (No. 2 & No. 3) are located to the south of FF Building, and the third (No. 1) is located at the southeast corner of "A" Battery. The systems use a wet scrubber to remove the material captured during coke pushing operations. The water is discharged into the coke quench sumps where the solid material settles before being removed and sold. (Note: Coke ovens not currently operating.)
 - 5) During the steelmaking process at the Basic Oxygen Furnace emissions are generated, part of which are captured by an electrostatic precipitator. The remainder is collected in a "drop-out" chamber and is called coarse dust. The coarse material is moved from the drop-out chamber to a storage bin using screw conveyors, then loaded into a covered truck for transportation to a landfill. The precipitator dust is moved by screw conveyors to a muller where it is wetted using steam. From the muller, the material is moved by covered belt conveyor to a storage bin, then loaded into a covered truck for transportation to a landfill.
 - 6) Emissions generated during steelmaking at the Electric Arc Furnaces are captured using a baghouse. The collected material is moved by screw conveyor to a pneumatic system which carries it to a storage silo. The silo is vented by a bin vent filter which returns the captured material to the silo. Enclosed trucks are used to transport the dust to a treatment facility.

During loading, the enclosed trucks are vented back to the storage silo.

C. Other operations:

- 1) Periodically, materials must be stored in piles in the field. These materials are coke, iron ore, coal, limestone, sand, coke screenings, and sump breeze. All piles are active except coke, coal, and limestone. The active piles will be treated with either an asphalt emulsion, petroleum resin, or an acrylic cement, once per month from March through October. Inactive piles will be treated with an asphalt emulsion, petroleum resin, or an acrylic cement, once per year. An inactive pile is defined as a storage pile that is disturbed less than once per month.
- 2) Normal access areas surrounding storage piles will be treated with an asphalt emulsion, petroleum resin, or an acrylic cement, once per month from March through October.
- 3) Reclaiming of field stored materials is performed using a frontend loader and trucks or railroad cars. During loading of vehicles the clearance between the bottom of the loader bucket and the vehicle sideboard will be maintained at two feet maximum.
- 4) Occasionally it is necessary to load coke into trucks or railroad cars at DD Building. The conveyor which moves the coke from the screens to the awaiting vehicle is equipped with a water spray system to control dust during the loading operation.
- D. Open areas and unpaved roads:
 - Open areas are indicated on Exhibit I. They will be treated with an asphalt emulsion, petroleum resin, or an acrylic cement, once per month between March and October.
 - 2) Unpaved roads are shown on Exhibit I. They will be treated, with an asphalt emulsion, petroleum resin, or an acrylic cement, once every twelve (12) days between March and October.
- E. Paved Area Control Practices

There are approximately 3.2 miles of paved roadways within the Rouge Steel Facility. Asphalt is the predominant surfacing material on all paved areas. Treatment procedures employed for dust control on paved roadways and parking lots are primarily devoted to sweeping and flushing practice. Specific treatment procedures are described below.

1) Wet Sweeping

a. Roadways receiving wet sweeper treatments on a daily schedule are listed in Figure 2. Daily treatments are applied to roadways as identified since they receive greatest traffic volume and consequently posses the largest dust loading potential. b. The traveled portion of parking areas (Figure 1) will receive wet sweep treatments once per month. A greater frequency rate will be implemented on these areas if warranted due to extended dry weather. The non-traveled portion of parking lots will be swept and cleaned a minimum of three times per year.

c. Materials and debris picked up during wet sweep activities will be transported and deposited in a designated holding site by sweeper equipment operator. Sweeping debris material piles will be monitored on a daily basis and appropriate control measures implemented to further reduce fugitive dust emission potential.

2) Street Flushing

All paved roadways in the Rouge Facility will receive flusher treatments on a daily schedule, five days a week for eight months of the year when outside temperatures are above freezing. Roadway assignments and respective application frequencies are presented in Figure 2. Daily flusher treatments are applied to roadways.

3) Equipment

Equipment utilized to implement the fugitive dust plan is either on site or contracted as necessary.

4) Schedule Change

Roadway treatment application schedules presented in this plan may be modified on a short term basis in response to adverse meteorological conditions or unusual circumstances requiring street cleaner equipment, such as spill situations or raw material handling. Daily treatment procedures will be foregone when:

- . Daily precipitation exceeds 0.1 in.
- . Freezing is a concern.
- . Road salt is applied and for 48 hours thereafter
- 5) Additional Measures

a. To control dust during scheduled raw material handling over paved surfaces, a flusher vehicle will sprinkle the truck hauling route.

b. Speed signs have been posted on major paved roadways throughout the Rouge Facility to maintain lower vehicular speeds. Maximum posted limit is 20 mph.

- F. Material handling conveyors:
 - Coal and coke handling conveyors are shown on Exhibit II. All of these conveyors, including transfer points, are enclosed except the No. 8 "Breeze Conveyor". That conveyor has a 180 degree cover over the belt.

- 2) The lime handling conveyor at the Basic Oxygen Furnace Building, including the transfer point, is enclosed. This conveyor is shown on Exhibit I.
- 3) The precipitator dust handling conveyor at the Basic Oxygen Furnace Building is shown on Exhibit I. That conveyor has a 180 degree cover over the belt.
- G. Dust suppressant:

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The suppressant used will be an acrylic cement, petroleum resin, or an asphalt emulsion. It is diluted in a 1 to 9 ratio with water, and applied at a rate of 0.3 gallons of solution per square yard of surface area covered throughout the plant (all sources).

H. Records in the format of Attachment I will be kept for a period of two years.

(Note: See attached DNR Required Recordkeeping for Fugitive Dust Sources Addendum for additional information.)

ADDENDUM

RECORDKEEPING FOR FUGITIVE DUST SOURCES

REQUIRED RECORDS

UNPAVED ROADS/LOTS 1. DATE OF TREATMENT

- 2. CONTROL MEASURE USED
- 3. RESPONSIBLE PERSON'S INITIALS
- 4. NAME OF PRODUCT APPLIED
- 5. AMOUNT OF SOLUTION/WATER APPLIED
- 6. DILUTION RATIO
- 7. ROAD SEGMENT/LOT IDENTIFICATION

PAVED ROADS/LOTS

- 1. DATE OF TREATMENT
- 2. CONTROL MEASURE USED
- 3. RESPONSIBLE PERSON'S INITIALS
- 4. ROAD SEGMENT/LOT IDENTIFICATION

STORAGE PILES/MATERIAL HANDLING

- 1. DATE OF TREATMENT
- 2. CONTROL MEASURE USED
- 3. RESPONSIBLE PERSON'S INITIALS
- 4. DILUTION RATIO (IF APPLICABLE)
- 5. AMOUNT OF DUST SUPPRESSANT/WATER APPLIED
- 6. IDENTIFICATION OF PILE/MATERIAL HANDLING OPERATION TREATED
- 7. EQUIPMENT USED

OPTIONAL RECORDS

WEATHER CONDITIONS

- 1. PRECIPITATION
- 2. TEMPERATURE
- 3. WIND DIRECTION AND VELOCITY

EXHIBIT B ROUGE STEEL COMPANY PARTICULATE EMISSION CONTROL PROGRAM

- On and after October 1, 1993, the particulate emission rate from the Electric Arc Furnace Baghouse shall not exceed 0.0024 grains per dry standard cubic foot.
- 2. On and after October 1, 1993, the Company shall conduct an initial stack test, at the Company's expense, to demonstrate compliance with the emission limit specified in paragraph #1 within 90 days of commencement of operations of the Electric Arc Furnace. No later than 45 days prior to testing, a complete stack test plan shall be submitted to the Air Quality Division and approved prior to testing. Results of the stack testing shall be submitted to the Air Quality Division no later than 60 days after the testing. The 90 day time period for the initial stack test may be extended in the event the Air Quality Division fails to review and approve the stack test plan. Subsequent stack tests shall be conducted within the later of 90 days of request by the Air Quality Division.
- 3. The Company shall not operate the "B" Blast Furnace Cast House unless all Emission Suppression Systems specified in the final "As Built" drawings and specifications, attached as Exhibit C, are installed and operating properly.
- 4. The Company shall monitor and record natural gas and steam usage and flow rates utilized for the "B" Blast Furnace Cast House Emission Suppression Systems. All records shall be kept on file for a period of at least two (2) years and made available to the Air Quality Division upon request.
- 5. The Company shall not operate the "C" Blast Furnace Cast House unless all Emission Suppression Systems specified in the final "As Built" drawings and specifications, attached as Exhibit D, are installed and operating properly.
- 6. The Company shall monitor and record natural gas and steam usage and flow rates utilized for the "C" Blast Furnace Cast House Emission Suppression Systems. All records shall be kept on file for a period of at least two (2) years and made available to the Air Quality Division upon request.
- 7. The Company shall not operate the Slab Scarfer for more than 20 hours per calendar day.
- 8. Records of the hours of operation of the Slab Scarfer, on a calendar day basis, shall be kept on file for a period of at least (2) years and made available to the Air Quality Division upon request.
- 9. The roof monitors at the electric arc furnace building shall remain closed during normal operating conditions, excluding process or operational malfunctions and facility repairs. Any abnormal situation requiring the opening of the roof monitors shall be described according to the requirements in paragraph 9 of the consent order referencing this particulate emission control program.