

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES
AIR POLLUTION CONTROL COMMISSION

In the matter of administrative proceedings)
concerning GENERAL MOTORS CORPORATION,)
CHEVROLET MOTOR DIVISION, a corporation)
organized under the laws of the State of)
Delaware and doing business at the Saginaw)
Metal Casting Plants, City of Saginaw,)
County of Saginaw, State of Michigan.)

APC No. 01-1980

STIPULATION FOR ENTRY OF CONSENT ORDER
AND
FINAL ORDER

This proceeding resulted from allegations by the staff of the Air Quality Division of the Department of Natural Resources (hereinafter referred to as the "Staff") and from the Michigan Air Pollution Control Commission (hereinafter referred to as the "Commission") requiring particulate emission offsets be implemented to support the issuance of a permit to install. The Staff alleges that General Motors Corporation, Chevrolet Motor Division, a Delaware corporation (hereinafter referred to as the "Company") doing business at the Chevrolet-Saginaw Metal Casting Plants, consisting of the Grey Iron Casting Plant (hereinafter referred to as "Grey Iron") and the Nodular Iron Casting Plant (hereinafter referred to as "Nodular Iron"), City of Saginaw, County of Saginaw, State of Michigan, is emitting particulate matter from the coke-fired cupolas at Grey Iron and Nodular Iron that contribute to ambient suspended particulate concentrations in excess of the National Ambient Air Quality Standards. Furthermore, the Commission required the Company to provide certain particulate emission reductions to support the issuance of a Permit to Install

a new cupola at Nodular Iron. The Company and the Staff hereby agree to the termination of this proceeding by entry of a Final Order by consent.

The Company and the Staff stipulate and agree as follows:

1. The Company and the Staff agree that the Chief of the Air Quality Division of the Department of Natural Resources is authorized by resolution of the Commission adopted June 28, 1977, as agent of the Commission to enter into this Final Order by consent.

2. The Company and the Staff agree that the Chief of the Air Quality Division of the Department of Natural Resources is charged with the investigation and enforcement of all orders, regulations, rules, standards and statutes of the State of Michigan concerning the emission and control of air contaminants.

3. The Company and the Staff acknowledge that Grey Iron and Nodular Iron are located in an area that the United States Environmental Protection Agency has classified as a nonattainment area for suspended particulates in accordance with Section 107 of the Federal Clean Air Act as amended in 1977.

4. The Company and the Staff agree that reductions of particulate matter from Grey Iron and Nodular Iron would facilitate the attainment of the federal suspended particulate Ambient Air Quality Standards in the area presently classified as nonattainment.

5. The Company and the Staff agree that the emission reductions required by this Order will reduce particulate emissions from Grey Iron and Nodular Iron sufficiently to provide the particulate offsets ordered by the Commission at its February 21, 1978, meeting to support the issuance of a permit to install a new cupola at Nodular Iron.

6. The Company and the Staff agree that this agreement and Final Order shall be submitted to the United States Environmental Protection Agency as

part of the Michigan State Implementation Plan (SIP) revisions in accordance with Part D, Section 171, et seq. of the Federal Clean Air Act as amended in 1977.

7. The Company and the Staff agree that the termination of this matter by a Final Order to be entered as a Consent Order is proper and acceptable.

8. The Company and the Staff agree that the signing of this Stipulation is for settlement purposes only and does not constitute an admission by the Company that the law has been violated. However, both Staff and the Company agree that the Company will abate the particulate emissions from the following processes at Grey Iron and Nodular Iron in accordance with the following time schedules:

A. NODULAR IRON CUPOLA NO. 2:

- (1) After the effective date of this Order, the Company shall not operate Cupola 2 at Nodular Iron without having placed in operation an afterburner which will reduce particulates from Cupola 2 at Nodular Iron.
- (2) After the effective date of this Order, the particulate emissions from Cupola 2 shall not exceed 19.5 tons per year and 0.057 pounds of particulate per 1,000 pounds of flue gas.
- (3) By May 1, 1980, the Company shall complete testing (conducted according to procedures approved by Staff) of Cupola 2 at Nodular Iron and submit to Staff the detailed report of the test data and results.

B. NODULAR IRON COLLECTORS CL-4W, CL-5W, AND CL-11W:

- (1) By the effective date of this Order the Company shall have completed improvements to collectors CL-4W, CL-5W, and CL-11W at Nodular Iron.

- (2) After the effective date of this Order, particulate emissions from each collector shall not exceed 7.4 tons per year and 0.014 pounds of particulate per 1,000 pounds of flue gas.
- (3) By the effective date of this Order, the Company shall have completed the testing required by Staff (conducted according to procedures approved by Staff) of the particulate emissions from collectors CL-4W, CL-5W, and CL-11W and submitted to the Staff the detailed report of the test data and results.

C. GREY IRON ARC FURNACES:

- (1) By the effective date of this Order, the Company shall have completed improvements to the collection systems serving the three (3) arc furnaces at Grey Iron and removed from service arc furnace D-4 at Grey Iron.
- (2) After the effective date of this Order, the particulate emissions from each arc furnace shall not exceed 22.7 tons per year and 0.09 pounds of particulate per 1,000 pound of flue gas.
- (3) By the effective date of this Order, the Company shall have completed the testing required by Staff (conducted according to procedures approved by Staff) of the particulate emissions from the three (3) arc furnaces at Grey Iron and submitted to the Staff the detailed report of the test data and results.

D. GREY IRON CUPOLA E-5:

- (1) After the effective date of this Order, the particulate emissions from Cupola E-5 at Grey Iron shall not exceed 18.0 tons per year and 0.05 pounds of particulate per 1,000 pounds of flue gas.

- (2) By the effective date of this Order, the Company shall have completed the testing (conducted according to procedures approved by Staff) of the particulate emissions from Cupola E-5 at Grey Iron and submitted to the Staff the detailed report of the test data and results.

E. GREY IRON CUPOLA A-1:

- (1) After the effective date of this Order, the Company shall not operate Cupola A-1 at Grey Iron without having placed in operation an afterburner which will reduce particulates from Cupola A-1 at Grey Iron.
- (2) After the effective date of this Order, the particulate emissions from Cupola A-1 shall not exceed 12.7 tons per year and 0.04 pounds of particulate per 1,000 pounds of flue gas.
- (3) By the effective date of this Order, the Company shall complete testing (conducted according to procedures approved by Staff) of Cupola A-1 at Grey Iron and submit to Staff the detailed report of the test data and results.

F. GREY IRON CUPOLA D-4:

- (1) By the effective date of this Order, the Company shall begin installation of an afterburner which will reduce particulates from Cupola D-4 at Grey Iron.
- (2) After March 1, 1980, the Company shall not operate Cupola D-4 at Grey Iron without having placed in operation the afterburner referred to in paragraph 8.F(1), above, on Cupola D-4 at Grey Iron.

- (3) After March 1, 1980, the particulate emissions from Cupola D-4 shall not exceed 12.7 tons per year and 0.04 pounds of particulate per 1,000 pounds of flue gas.
- (4) By July 1, 1980, the Company shall complete testing (conducted according to procedures approved by Staff) of Cupola D-4 at Grey Iron and submit to Staff the detailed report of the test data and results.

G. NODULAR IRON CUPOLA 3:

- (1) By the effective date of this Order, the Company shall begin installation of an afterburner which will reduce particulates from Cupola 3 at Nodular Iron.
- (2) After March 1, 1980, the Company shall not operate Cupola 3 at Nodular Iron without having placed in operation the afterburner referred to in paragraph 8.G(1), above, on Cupola 3 at Nodular Iron.
- (3) After March 1, 1980, the particulate emissions from Cupola 3 shall not exceed 19.5 tons per year and 0.057 pounds of particulate per 1,000 pounds of flue gas.
- (4) By July 1, 1980, the Company shall complete testing (conducted according to procedures approved by Staff) of Cupola 3 at Nodular Iron and submit to Staff the detailed report of the test data and results.

H. GREY IRON IRON YARD:

- (1) By December 15, 1979, the Company shall submit to Staff plans and specifications and an application for an installation permit describing the air pollution control device(s) and/or

- other equipment to be used to adequately control the particulate emissions from the iron yard at Grey Iron.
- (2) By May 1, 1980, the air pollution control device(s) and/or other equipment to be used to control the particulate emissions from the iron yard shall be placed on order with a manufacturer.
 - (3) By December 1, 1980, the Company shall begin on-site installation of said air pollution control device(s) and/or other equipment referred to above, after receiving the installation permit referred to above, and notify Staff in writing that this installation has begun.
 - (4) By March 31, 1981, the Company shall have placed in operation said air pollution control device(s) and/or other equipment referred to above and notify the Staff in writing that the device(s) and/or equipment have been placed in operation.
 - (5) By June 30, 1981, the Company shall complete testing (conducted according to procedures approved by Staff) of said air pollution control device(s) and/or other equipment referred to above and submit to the Staff the detailed report of the test data and results.

I. MALFUNCTIONS:

After the effective date of this Order, the Company shall follow the following procedures whenever a malfunction or failure of a primary cupola control system occurs at Grey Iron or Nodular Iron such that any cupola emissions bypass the primary cupola control system. For purposes of this Order, the word "bypass" shall mean any visible emission, other than water vapor, out the top of a cupola (wet cap).

- (1) Immediately initiate an investigation to identify the cause of the bypass.
- (2) If as a result of the investigation carried out pursuant to paragraph 8.I(1), above, the Company cannot identify the cause of the bypass within two (2) hours after the commencement of the bypass, the Company shall cease charging iron to the cupola and immediately initiate complete shutdown of the cupola. Such shutdown procedures shall be completed within three (3) hours.
- (3) If as a result of the investigation carried out pursuant to paragraph 8.I(1), above, the Company does identify the cause of the bypass within two (2) hours after the commencement of the bypass, the Company shall either:
 - (a) Implement corrective measures and eliminate the bypass within three (3) hours after identifying the cause of the bypass; or
 - (b) Immediately cease charging iron to the cupola and immediately initiate complete shutdown of the cupola. This shutdown of the cupola shall be completed within three (3) hours after the cause of the bypass has been identified.
- (4) If the Company determines that the cause of the bypass is not related to the system instrumentation, the exhaust system dampening, or bridging in the cupola, and the Company is implementing corrective measures pursuant to paragraph 8.I(3)(a), above, all charging of iron to the cupola shall cease and all cupola air blasting shall cease except as necessary to protect process

equipment or to allow partial burndown as needed to allow safe start-up. The provisions of this paragraph shall apply until the completion of corrective measures and until the bypass has been stopped.

J. GREY IRON AND NODULAR IRON BURNDOWN CAPS:

- (1) By the effective date of this Order, the Company shall have installed burndown caps on Cupolas A-1, B-2, C-3, D-4, E-5, G-6, K-7, L-8, and M-9 at Grey Iron.
- (2) After March 1, 1980, the Company shall not operate any of Cupolas 1, 2, 3, 4, and 5 at Nodular Iron without having installed a burndown cap on that cupola.
- (3) After the burndown caps referred to above have been installed, they shall be placed in the lowered or covering position at anytime when the Company has stopped charging a cupola and the material in the cupola has been reduced to a level that would allow emissions to bypass the primary cupola control system.

9. The Company and the Staff agree that the actions described in paragraphs 8.A, 8.B, 8.C, 8.D, 8.E, 8.F, 8.G, and 8.H represent additional requirements beyond what was required under the rules and orders of the Commission prior to the effective date of this Order.

10. The Company and the Staff do not regard this abatement program as a variance subject to the 12-month limitation specified in Section 22 of the Air Pollution Act, being MCLA 336.32. Approval of this abatement program is not a major state action for purposes of further environmental review pursuant to Executive Order 1974-4.

11. The Company and the Staff both acknowledge that a public hearing on this abatement program was held on January 15, 1980. Both Staff and the Company consent to enforcement of this Stipulation and Final Order in the same manner and by the same procedures for all final orders entered pursuant to Section 16 of 1972 PA 257, MCLA 336.26, including enforcement pursuant to 1970 PA 127, MCLA 691.1201 et. seq.; MSA 14.528(201) et. seq.

Approved as to Form and Content:

B.M. Aickbom To Lincoln

CHEVROLET MOTOR DIVISION
GENERAL MOTORS CORPORATION

Dated: 3-31-80

Approved as to Content:

Delbert Rector

Delbert Rector, Chief
AIR QUALITY DIVISION
DEPARTMENT OF NATURAL RESOURCES

Dated: April 16, 1980

Approved as to Form:

Stewart H. Freeman

Stewart H. Freeman
Assistant Attorney General
DEPARTMENT OF ATTORNEY GENERAL

Dated: April 14, 1980

FINAL ORDER

This Commission having had opportunity to review the above stated Stipulation for Entry of Consent Order, and this Commission having authorized the Chief of the Air Quality Division of the Department of Natural Resources as agent of the Commission to enter into Consent Orders,

IT IS ORDERED that this Consent Order shall be entered in the record of this Commission as stated herein.

AIR POLLUTION CONTROL COMMISSION

By: Delbert Rector
Delbert Rector, Chief
Air Quality Division
Department of Natural Resources

Dated: April 16, 1980