STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES
AIR POLLUTION CONTROL COMMISSION

In the matter of administrative proceedings against CWC CASTINGS DIVISION OF TEXTRON, INC., a corporation organized under the laws of the State of Delaware and doing business at 2672 Henry Street, City of Muskegon, County of Muskegon, State of Michigan.	APC No. 12-1979

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"). The Staff alleges that CWC Castings Division of Textron, Inc. a Delaware corporation (hereinafter referred to as the "Company"), located at 2672 Henry Street, City of Muskegon, County of Muskegon, State of Michigan, is emitting particulate matter from its foundry operations (hereinafter referred to as Plant 1, Plant 3, Plant 4, and Plant 5) that may be in excess of allowable limits as established by Administrative Rules, R 336.44, R 336.46, and R 336.48, 1973 AACS, Administrative Code, and which operations should have improved controls and equipment to reduce emissions and to minimize collector malfunctions. 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 admits that the Chief of the Air Quality Division of the Department of Natural Resources is authorized by resolution of the Air Pollution Control Commission (hereinafter "Commission") adopted June 28, 1977, as agent of the Commission to enter into this Final Order by consent.

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

4. The Company and the Staff agree to the following definitions for the purposes of paragraph 5, 6, and 7, below:

(a) Primary collector: an air pollution control device designed to meet the applicable emission limitations specified in the Commission's rules or in conditions of permits issued to the Company by the Commission.

(b) Secondary collector: an air pollution control device designed to reduce air pollution emissions. A secondary collector shall reduce emissions from a cupola to at least the level normally expected from a cupola equipped with a single stage wet cap air pollution control device only. A secondary collector will be capable of operating both simultaneously with a primary collector or as the sole air pollution control device in case the primary collector is not operational.

(c) Back-up control equipment: equipment designed to substitute for a primary collector or kept on site as replacement parts for a primary collector.

5. 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. Both Staff and the Company agree that the particulate matter emissions from the foundries should be abated.

The Company shall achieve compliance with all the Commission's rules in accordance with the following schedule:

(a) PLANT 1 - MUSKEGON HEIGHTS:

(Additional Cupola Control Program)

(1) By December 31, 1979, the Company shall have reduced the production at Plant 1 in Muskegon Heights to a maximum of 75 tons per day and shall remain at this reduced production rate until the air pollution control devices referred to in paragraphs (2) through (10), below, have been placed in operation. Staff and the Company acknowledge that the production at Plant 1 in Muskegon Heights has been reduced from about 150 tons per day to the current production level of 110 tons per day and will remain at this reduced capacity until December 31, 1979.

(2) On April 24, 1979, the Company was issued a Permit to Install (No. 147-79) the demisting section and the secondary collector and/or back-up control equipment, to be used to control the particulate emissions from the two alternating cupolas and cupola charge doors to provide additional reliability of performance and back-up control capability to maintain compliance with the Commission's rules.

(3) By January 1, 1980, the Company shall submit to the Staff evidence to substantiate that the demisting section and the secondary collector and/or back-up control equipment, referred to above have been placed on order with the manufacturer.

(4) By May 31, 1980, the Company shall begin on-site installation of the secondary collector and/or back-up control equipment

referred to above and notify the Staff in writing that this installation has begun.

(5) By July 31, 1980, the Company shall have placed in operation the secondary collector and/or back-up control equipment, referred to above and notify the Staff in writing that the secondary collector and/or back-up control equipment has been placed in operation.

(6) By October 1, 1980, the Company shall begin on-site installation of the demisting section and notify the Staff in writing that this installation has begun.

(7) By December 31, 1980, the Company shall have placed in operation the demisting section referred to above and notify the Staff in writing.

(8) By February 28, 1981, emissions from the alternating cupolas and cupola charge doors in Plant 1 shall be in compliance with all of the Commission's rules.

(9) By April 30, 1981, the Company shall complete the testing (conducted according to procedures approved by Staff) of the revised cupola emission control system, and submit to the Staff the detailed report of the test data and results.

(Additional Electric Arc Holding Furnace Control Program)

(10) On April 24, 1979, the Company was issued a Permit to Install (No. 149-79) the air pollution control device(s) and/or other equipment to be used to control particulate emissions from the electric arc holding furnace during all phases of operation.

(11) By January 1, 1980, the Company shall submit to the Staff evidence to substantiate that the required air pollution control device(s) and/or other equipment referred to above have been placed on order with the manufacturer.

(12) By March 31, 1980, the Company shall begin on-site installation of said air pollution control device(s) and/or other equipment referred to above and notify the Staff in writing that this installation has begun.

(13) By April 30, 1980, the Company shall have placed in operation said air pollution control device(s) and/or other equipment referred to in paragraphs 5(a)(7), (8), and (9), above, and notify the Staff in writing that the device(s) and/or equipment have been placed in operation.

(14) By June 30, 1980, emissions from the electric arc holding furnace in Plant 1 shall be in compliance with all of the Commission's rules.

(West Side Cleaning Room Control Program)

(15) On November 8, 1978, the Company was issued a Permit to Install (No. 948-78) the air pollution control devices to control the particulate emissions from the shakeout and grinding operations in the west side cleaning room to obtain compliance with the Commission's rules.

(16) By October 31, 1979, the Company shall have placed in operation the air pollution control device(s) referred to above and emissions from the shakeout and grinding operations in the west side cleaning room shall be in compliance with all of the Commission's rules.

(b) PLANT 3 -- ROOSEVELT PARK:

(Shakeout, Casting Cooling, and Sand Handling Control Program)

(1) On March 2, 1979, the Company submitted to the Staff, pursuant to the Commission's rules, complete plans and specifications and an application for an installation permit (No. 120-79) describing the air pollution control device(s) and/or other equipment to be used to control the smoke and particulate emissions from the shakeout, casting cooling, and sand handling disposal operation.

(2) The Staff acknowledges that the Company has submitted evidence to substantiate that the required air pollution control device(s) and/or other equipment referred to above have been placed on order with a manufacturer.

(3) The Staff acknowledges that the Company began on-site installation of the air pollution control device(s) and/or other equipment referred to above and notified the Staff in writing that this installation has begun.

(4) By December 31, 1979, the Company shall have placed in operation the air pollution control device(s) and/or other equipment referred to above and notified the staff in writing that the device(s) and/or other equipment referred to above have been placed in operation.

(5) By February 28, 1980, emissions from the shakeout, casting cooling, and sand handling disposal operations in Plant 3 shall be in compliance with all of the Commission's rules.

(New Sand Processing Plant)

(6) On April 1, 1979, the Company submitted to the Staff, pursuant to the Commission's rules, complete plans and specifications and an application for an installation permit (No. 184-79) describing the new sand processing plant and the associated air pollution control equipment.

(7) By February 28, 1980, the Company shall submit to the Staff one of the following:

(a) Evidence to substantiate that the equipment referred to in paragraph (6) has been placed on order with a manufacturer; or

(b) Submit to the Staff, pursuant to the Commisison's rules, complete plans and specifications describing air pollution control equipment for the existing Sand Processing Plant; or

(c) Notify the Staff that the existing Sand Processing Plant will be closed down on or before March 31, 1980.

(8) By August 31, 1980 (if (a) or (b) of paragraph (7) applies), the Company shall begin on-site installation of the applicable facilities and notify the Staff in writing that the installation has begun.

(9) By December 31, 1980 (if (a) or (b) of paragraph (7) applies), the Company shall have placed in operation the applicable facilities referred to above and notify the Staff in writing that this equipment has been placed in operation and that the operation of the existing Sand Processing Plant has been discontinued if (a) of paragraph (7) applies.

(Cupola Charge Doors Control Program)

(10) On April 27, 1979, the Company was issued a Permit to Install (No. 148-79) the air pollution control device(s) and/or other equipment to be used to control the smoke and particulate emissions from the cupola charge doors.

(11) By February 28, 1980, the Company shall submit to the Staff evidence to substantiate that the required air pollution control device(s) and/or other equipment to be used to control the smoke and particulate emission from the cupola charge doors have been placed on order with a manufacturer.

(12) By July 15, 1980, the Company shall begin on-site installation of the air pollution control device(s) and/or other equipment referred to above and notify the Staff in writing that this installation has begun.

(13) By August 15, 1980, the Company shall have placed in operation the air pollution control device(s) and/or other equipment referred to above and notify the Staff in writing that the device(s) and/or other equipment have been placed in operation.

(14) By October 15, 1980, emissions from the cupola and cupola charge doors in Plant 3 shall be in compliance with all of the Commission's rules.

(Additional Cupola Control Program)

(15) By June 30, 1980, the Company shall submit to Staff, pursuant to the Commission's rules, complete plans and specifications and an application for an installation permit describing the secondary collector and/or back-up control equipment to be

used to control the particulate emissions from the cupolas to provide additional reliability of performance and back-up control capability to maintain compliance with the Commission's rules.

(16) By February 15, 1981, the Company shall submit to the Staff evidence to substantiate that the required secondary collector and/or back-up control equipment to be used to control the particulate emissions from the cupolas have been placed on order with a manufacturer.

(17) By May 1, 1981, and after receiving the installation permit referred to above, the Company shall begin on-site installation of said secondary collector and/or back-up control equipment referred to above and notify the Staff in writing that the installation has begun.

(18) By July 31, 1981, the Company shall have placed in operation said secondary collector and/or back-up control equipment referred to above and notify the Staff in writing that the secondary collector and/or back-up control equipment have been placed in operation.

(Second Stage Demisting for Cupola Control System)

(19) By January 1, 1981, the Company shall submit to Staff, pursuant to the Commission's rules, complete plans and specifications and an application for an installation permit describing the additional demisting section for the existing cupola emission control system to control the particulate emissions from the cupolas to maintain compliance with the Commission's rules.

(20) By July 15, 1981, the Company shall submit to the Staff evidence to substantiate that the required additional demisting section for the existing cupola emission control system has been placed on order with a manufacturer.

(21) By October 1, 1981, and after receiving the installation permit referred to above, the Company shall begin on-site installation of the additional demisting section for the existing cupola emission control system, and notify the Staff in writing that the installation has begun.

(22) By December 31, 1981, the Company shall have placed in operation the additional demisting section for the existing cupola emission control system referred to in paragraphs 5(b)(17), (18), and (19), above, and notify the Staff in writing that the additional demisting section has been placed in operation.

(23) By May 1, 1982, the Company shall complete the testing (conducted according to procedures approved by Staff) of the revised cupola emission control system and submit to the Staff a detailed report of test data and the results.

(c) PLANT 4 -- MUSKEGON HEIGHTS:

(Electric Arc Melting Furnaces)

The Company shall not simultaneously operate the two electric arc melting furnaces until the air pollution control device(s) and/or other equipment (approved by the Staff or the Commission) to be used to control the smoke and particulate emissions from two electric arc melting furnaces has been placed in operation.

(d) PLANT 5 -- ROOSEVELT PARK:

(Additional Electric Arc Furnace Control Program)

(1) On April 27, 1979, the Company was issued a Permit to Install (No. 436-74A) the air pollution control device(s) and/or other equipment to be used to provide additional control of the particulate emissions from the existing electric arc holding furnace No. 12M during all phases of operation.

(2) By January 15, 1980, the Company shall submit to Staff evidence to substantiate that the required air pollution control device(s) and/or other equipment referred to above have been placed on order with a manufacturer.

(3) By March 15, 1980, the Company shall begin on-site installation of said air pollution control device(s) and/or other equipment referred to above and notify the Staff in writing that this installation has begun.

(4) By May 15, 1980, 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 other equipment have been placed in operation.

(5) By July 15, 1980, emissions from the electric arc holding furnace No. 12M in Plant 5 shall be in compliance with all of the Commission's rules.

(New Induction Holding Furnace or Additional Control of Existing Arc Holding Furnace No. 4)

(6) On April 1, 1979, the Company submitted to the Staff, pursuant to the Commission's rules, plans and specifications and an

application for an installation permit (hereinafter referred to as the "permit") describing the new induction furnace that will be utilized to replace the exising electric arc holding furnace No. 4.

(7) By January 15, 1980, the Company shall submit to Staff evidence to substantiate that the new induction holding furnace referred to above (or additional control of the existing electric arc holding furnace No. 4) has been placed on order with a manufacturer.

(8) By July 31, 1980, the Company shall begin on-site installation of the new induction holding furnace referred to above (or additional control of the existing electric arc holding furnace No. 4) and notify the Staff in writing that this installation has begun.

(9) By October 31, 1980, the Company shall have placed in operation the new induction holding furnace referred to above (or additional control of the existing electric arc holding furnace No. 4) and notify the Staff in writing that the new induction holding furnace has been placed in operation and also have discontinued operation of the existing electric arc holding furnace No. 4 or provide additional control on the existing electric arc holding furnace No. 4.

(Additional Cupola Control Program)

(10) By April 1, 1982, the Company shall submit to the Staff pursuant to the Commission's rules, complete plans and specifications and an application for an installation permit describing the additional demisting section, and the secondary collector

and/or back-up control equipment, to be used to control the particulate emissions from the east cupola to provide additional reliability of performance and back-up control capability to maintain compliance with the Commission's rules.

(11) By September 1, 1982, the Company shall submit to the Staff evidence to substantiate that the additional demisting section, and secondary collector and/or back-up control equipment, to be used to control the particulate matter emissions from the east cupola have been placed on order with the manufacturer.

(12) By April 1, 1983, and after receiving the installation permit referred to above the Company shall begin on-site installation of the additional demisting section and secondary collector and/or back-up control equipment, referred to above and notify the Staff in writing that this installation has begun.

(13) By July 31, 1983, the Company shall have placed in operation the additional demisting section, and the secondary collector and/or back-up control equipment referred to above and notify the Staff in writing that the additional demisting section, and the secondary collector and/or back-up control equipment have been placed in operation.

(14) By September 30, 1983, the Company shall complete the testing (conducted according to procedures approved by Staff) of the revised cupola emission control system and submit to the Staff a detailed report of the test data and results.

(e) ROAD AND YARD DUST CONTROL PROGRAM:

By October 31, 1979, the Company shall submit and begin implementation of a yard and road dust control program for Plant 1, Plant 3, Plant 4, and Plant 5. This program shall consist of the following:

(1) The plant yard surfaces shall be maintained through regular sweeping of paved surfaces by wetted brush or vacuum sweepers and regular application of dust suppressants on unpaved roadways commensurate with meteorological conditions.

(2) Plant elevated surfaces, such as roofs, shall be maintained clean by prompt removal of material deposited from spills and by removing such dust in a manner to minimize introduction of contaminants into the ambient air.

(3) Vehicular traffic in the yard areas and plant roadways shall be regulated to reasonable speeds necessary to minimize dust generation under dry surface conditions.

6. MALFUNCTION ABATEMENT PLAN: By April 1, 1980, the Company shall submit and begin implementing an acceptable malfunction abatement plan to prevent, detect and correct malfunctions of all air cleaning devices. This plan shall include the following:

(a) A complete preventative maintenance program, including identification of the individual(s) responsible for inspecting, maintaining and repairing the air cleaning devices; a description of the items or conditions that will be inspected; the frequency of these inspections or repairs; and an identification of the replacement parts which will be maintained in inventory for quick replacement.

(b) An identification of the source and air cleaning device operating variables that will be monitored in order to detect a malfunction or failure, the normal operating range of these variables, and a description of the monitoring procedures and frequencies.

(c) A description of the corrective procedures that will be taken in the event of a malfunction or failure, including the maximum time required for these corrections, in order to achieve compliance with the Commission's rules.

(d) If excessive emissions, lasting more than two (2) hours, do occur as a direct result of a malfunction of a cupola or arc furnace air cleaning device, the Company shall:

(1) Notify the Staff as soon as is reasonably possible.

(2) Submit to the Staff, in writing, within ten (10) days, a detailed report, including probable causes, duration of violation, remedial action taken, and what steps are being undertaken to prevent a reoccurrence. These preventative steps shall become a part of the Plan.

7. If at any time after the effective date of this order, a failure or malfunction of a cupola primary collector or an electric arc furnace emission collector occurs such that the resultant emissions exceed the limits specified in the Commission's rules the Company shall shut down the source of emissions consistent with safe operating procedures, except as follows. The company may continue the operation of one inadequately controlled cupola or electric arc furnace for up to 72 hours providing all of the following conditions are met:

(a) The Company is proceeding as expeditiously as possible to repair the collector.

(b) The Company demonstrates that the emissions are not likely to cause a violation of the National Ambient Air Quality Standard for any contaminant.

(c) In the case of failure or malfunction of a cupola primary collector, no other cupola at the Company is operating without the primary collection system. In the case of failure or malfunction of an electric arc furnace emission collector, no other electric arc furnace at the Company is operating without an emission collector.

(d) The District Engineer of the Staff has not notified the Company that the emissions are causing, or will cause by further operation of the cupola, a significant nuisance to the community, taking into consideration weather conditions and expected duration of inadequately controlled operation. This subparagraph (d) shall not apply in the event a wet cap has been installed and is operating on the inadequately controlled cupola.

8. The dates contained in this Order are based upon an entry of this Order by October 16, 1979, and the issuance of the respective permits before the Company orders equipment or begins installation. To the extent this Order is entered after October 16, 1979, the dates contained in this Order shall be adjusted forward in time. To the extent a permit is issued less than twelve (12) weeks before a date contained in this Order by which the Company is required to order equipment or begin installation, the dates applicable to that project which is the subject of the permit shall be adjusted forward in time to reflect the period of such delay in the issuance of the permit.

9. With respect to the Sand Dryer, the Westside Cleaning Room, the Arc Furnace at Plant No. 1 and two (2) of the Arc Furnaces (12M and No. 4) at Plant No. 5, and the Cupola Charge Doors, the Company may continue operation of these facilities during the implementation of this Order provided the emissions do not exceed the current rates and the following operation and maintenance conditions are met:

(a) The Company establishes and implements the malfunction abatement plan as required by this Order.

(b) The Company establishes and implements the road and yard dust control as required by this Order.

(c) The Company maintains and repairs those facilities in accordance with prudent engineering practice.

10. The Company, the Commission, and the Chief of the Air Quality Division of the Department of Natural Resources agree that this Consent Order, any supporting data, and any necessary data that may be requested by the U.S. Environmental Protection Agency which is available to the Staff or provided by the Company shall be transmitted to the U.S. Environmental Protection Agency for approval as a revision to the Michigan State Implementation Plan, provided that there exists a demonstration which is satisfactory to the Air Quality Division which identifies the particulate emission reductions that will be provided through the implementation of this order, the air quality impact of those reductions, and that such reductions represent reasonable progress towards the attainment of the secondary total suspended particulate National Ambient Air Quality Standard.

11. The Staff and the Company 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.

12. Staff and the Company both acknowledge that a public hearing on this abatement program was held on October 15, 1979. 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.

13. The Chief of the Air Quality Division of the Department of Natural Resources may extend any date contained in this order upon good cause shown by the Company for a period of up to ninety (90) days.

Approved as to Form and Content:

CWC CASTINGS DIVISION
TEXTRON, INC.

Dated: 12/18/79

Approved as to Content:

Delbert Rector

Delbert Rector, Chief
AIR QUALITY DIVISION
DEPARTMENT OF NATURAL RESOURCES

Dated: February 15, 1980

Approved as to Form:

Stewart H. Freeman
Assistant Attorney General
DEPARTMENT OF ATTORNEY GENERAL

Dated: February 13, 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: February 15, 1980