



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF AIR & WASTE MANAGEMENT
715 GRANTHAM LANE
NEW CASTLE, DELAWARE 19720

AIR RESOURCES
SECTION

TELEPHONE: (302) 323 - 4542
FAX NO.: (302) 323 - 4561

September 7, 1995

Permit: APC-95/0569-CONSTRUCTION/OPERATION
Chrysler Corporation
Newark Assembly Plant

Chrysler Corporation
Newark Assembly Plant
P.O. Box 6040
Newark, DE 19714-6040

ATTENTION: Mr. J. A. Wolfe
Plant Manager

Gentlemen:

Pursuant to the State of Delaware "Regulations Governing the Control of Air Pollution", Regulation No. 2, Section 2, approval of the Department of Natural Resources and Environmental Control is hereby granted for the construction and operation of the Emission Units and Pollution Control Devices listed below and the Pre-Approved Changes listed in Condition No. 5 of this permit at Chrysler Corporation's Newark Assembly Plant in Newark, Delaware, in accordance with the application submitted on Form No. AQM-4 dated June 1, 1995 signed by J. A. Wolfe, the letter dated July 18, 1995 signed by W. Charles Moeser, and the correspondence dated August 2, 1995.

Emissions Unit and Pollution Control Device Identification

Table 1 Fuel Burning Equipment	
Stationary Source ID	Rated Heat Input Capacity (btu x 10 ⁶ per hour)
Boiler No. 1	72
Boiler No. 2	72
Boiler No. 3	72
Boiler No. 4	72
Boiler No. 5	72
Two (2) Air Supply Houses - Topcoat Booth	1.10 (each)

PERMIT: APC-95/0569 CONSTRUCTION/OPERATION (PAL)**CHRYSLER CORPORATION****NEWARK ASSEMBLY PLANT**

September 7, 1995

Page 2

Two (2) Air Supply Houses - Topcoat Booth	1.0 (each)
Eight (8) Air Supply Houses - Topcoat Booth	0.9 (each)
Three (3) Air Supply Houses - High Bake Repair	8.75 (each)
Air Supply House - Low Bake Repair	1.10
Air Supply House - Anti Chip	9.75
Waste Water Treatment Building Heater	1.06
Diesel Fired Pump - 2	0.60 (each)
Anti Chip IR Heater	1.4
East and West Topcoat Booths IR Heaters - 2	1.35 (each)
High Bake Operation IR Heater	1.4
Miscellaneous Heaters	18.4 (total)
Emergency Generator	1.03

Table 2 Process Equipment	
Emissions Unit	Pollution Control Device (PCD)
EDP Prime Coat Operation	Thermal Incinerator
Powder Anti Chip Booth	Recirculating Air and HEPA Filters
Powder Anti Chip Oven	Thermal Incinerator
East and West Topcoat Booths	Water Scrubber System
East and West Topcoat Ovens	Thermal Incinerator
Hi Bake Repair & Oven	Water Scrubber System
Low Bake Repair Booth & Oven	Dry Filters
Spoven	Dry Filters
Eight Clean Shops	Dry Filters
Underbody Deadener Booth	Dry Filters
Sealer & Adhesives	NONE
Miscellaneous Operations	NONE

**PERMIT: APC-95/0569 CONSTRUCTION/OPERATION
CHRYSLER CORPORATION
NEWARK ASSEMBLY PLANT**

September 7, 1995

Page 3

Blackout Booth	Dry Filters
Touch up Booth	Dry Filters
Solvent Wipe and Industrial Solvent Cleaners	NONE
Sanding Booths	Vacuum System, Cyclones
Solvent Metal Degreasers	NONE
Welding Operations	Dry Filters

This permit is issued subject to the following conditions:

Plant Site Emission Limits

- 1 VOC emissions shall not exceed the plantwide applicability limit (PAL) of 1112.8 tons per year. NO_x emissions shall not exceed the PAL established in accordance with the procedures listed in Attachment A. Compliance with the PAL shall be determined within 30 days of the end of each month based on the prior 12 months.
- 2 Daily emissions of VOCs plantwide shall not exceed 5.3 tons. Daily emissions of NO_x plantwide shall not exceed the daily limit established in accordance with the procedures listed in Attachment A. Compliance with the daily limit will be based on daily emissions of specific units and materials as required elsewhere in this permit. For all other sources daily emissions will be based on monthly emissions prorated to individual days, based on daily vehicle production volumes or another emissions indicator as approved by the DNREC.
- 3 These limits shall be retained until November 15, 2002, after which they will be adjusted downward to reflect the effect of any new state NO_x and VOC regulations applicable to sources at the plant. The downward adjustment will be based on the contribution of the affected sources to actual emissions at the time the rule goes into effect.

PAL PROVISIONS:

- 4 The Company shall not construct new stationary sources, modify existing stationary sources, or operate existing stationary sources such that the plantwide annual and daily VOC and NO_x limits are exceeded. The Company shall comply with Regulation 25, "Preconstruction Review", for any proposed construction or modification increasing the plantwide VOC or NO_x annual emission limits.

Pre-Approved Changes:

- 5 The Company is approved to make the changes listed under 5(a) and 5(b). The Company shall comply with all certification, recordkeeping, and reporting requirements listed in this permit for the following pre-approved changes. Any change that is subject to a new applicable requirement as defined in Regulation 30 and not listed in this permit shall comply with Condition 7 or 8 of this permit.

**PERMIT: APC-95/0569 CONSTRUCTION/OPERATION
CHRYSLER CORPORATION
NEWARK ASSEMBLY PLANT**

September 7, 1995

Page 4

- a. Conventional pre-approved changes:
 - i. all activities outlined in Attachment B.
 - ii. the emissions unit is replaced in kind or replaced with a unit with inherently lower emissions.
 - iii. operational changes which will not increase the short term emission limit established in Condition 2.
 - iv. any of the exemptions listed under Regulation 2, Section 3, "Exemptions", except 3.1(b)(1) dated March 8, 1995.
 - b. PAL pre-approved changes (for VOC and NO_x sources only):
 - i. in-kind replacement of an emissions unit or replacement with an inherently lower emitting unit.
 - ii. introduction of new types of VOC containing materials used for new models.
 - iii. changes in the number and type of applicator equipment.
 - iv. changes in the physical dimensions of each oven or booth to accommodate production needs.
 - v. addition or elimination of auxiliary cleaning steps or minor coating operations which affect VOC emissions.
- 6 The Company shall maintain adequate records of the changes made at the facility under Condition 5 so as to ensure proper recordkeeping and reporting of emissions. Calculations based on material balances, emissions factors and test data used to ensure and demonstrate that the emissions limits in Conditions 1 and 2 are not exceeded shall reflect such changes and shall be maintained for a period of five (5) years. Changes under Condition 5(b) shall be those pre-approved changes recorded and reported pursuant to Conditions 66, 81, and 86.
- 7 Except for the pre-approved changes described in Condition 5 of this permit, Regulation 2, Minor New Source Review, shall continue to apply to emission units that are proposed modifications with increases in associated VOC or NO_x emissions or to proposed new emission units to be constructed with less than 25 tons per year potential to emit for VOC or NO_x. A complete application shall be submitted with sufficient information for public notice. Forty-five (45) days following the public notice, unless the Department objects or issues supplemental conditions, the project will be automatically approved. Should a public hearing be requested, the automatic approval process will cease.
- 8 Except for the pre-approved changes in Condition 5 of this permit, modification to an existing emission unit with a potential to increase emissions by 25 tons per year or greater of VOCs or NO_x or new construction of an emission unit with a potential to emit greater than 25 tons per year VOC or NO_x shall be subject to Regulation No. 2. No additional emission rate requirements will be added to the PAL permit so long as toxics concerns are adequately addressed, PAL limits are not exceeded, and best available control technology is incorporated in the installation. Best available control technology decisions will have an emphasis on pollution prevention rather than the more traditional end-of-pipe analysis. The Company shall submit a permit amendment request in accordance with Regulation No. 2 for an increase in the short term emission limit as stated in Condition No. 2 of this permit.

PERMIT: APC-95/0569 CONSTRUCTION/OPERATION

CHRYSLER CORPORATION

NEWARK ASSEMBLY PLANT

September 7, 1995

Page 5

9 Pollution Prevention: The Company, to the extent reasonable, shall include, at a minimum, the following program elements:

- a. A process to formulate performance goals and objectives to comply with VOC emission limits and standards through the implementation of Pollution Prevention.
- b. Formulate data collection necessary for the evaluation of Pollution Prevention effectiveness.
- c. Develop a key employee training program to promote Pollution Prevention at the facility.
- d. A statement of commitment to implement Pollution Prevention measures at the facility.

10 MACT Determinations: The Company shall comply with Section 112(g) requirements after they become effective. Preconstruction review requirements that may be triggered under this provision can not qualify as a pre-approved change.

General Provisions:

11 Representatives of the Department of Natural Resources and Environmental Control may, at any reasonable time, inspect this facility.

12 Emissions in excess of any permit condition or emissions which create a condition of air pollution shall be reported to the Division of Air and Waste Management immediately.

13 All pollution control equipment shall be operating properly when the corresponding process equipment is in operation.

14 The emission of visible air contaminants from any source at this facility shall not exceed twenty percent (20%) opacity for an aggregate of more than three (3) minutes in any one (1) hour period or more than fifteen (15) minutes in any twenty-four (24) hour period.

15 Odors from this facility shall not be detectable beyond plant property lines in sufficient quantities to cause or create a condition of air pollution.

16 The Company shall not cause, allow, or permit the disposal of more than 5 kilograms (kg) (11 pounds (lb)) of any VOCs, or of any materials containing more than 5 kg (11 lb) of any VOCs, at that facility in any one (1) day in a manner that would permit the evaporation of VOC into the ambient air.

- a. This provision includes, but is not limited to the disposal of VOC from VOC control devices. This provision does not apply to:
 - i. Any VOC or material containing VOC emitted from a regulated entity that is subject to conditions of this or any other permit issued by the Department.
 - ii. Any VOC or material containing VOCs used during process maintenance turnarounds for cleaning purposes, provided that the provisions of Conditions 16b., 16c., and 16d. are followed.

**PERMIT: APC-95/0569 CONSTRUCTION/OPERATION
CHRYSLER CORPORATION
NEWARK ASSEMBLY PLANT**

September 7, 1995

Page 6

- b. The Company shall not use open containers to store or dispose of cloth or paper impregnated with VOCs that are used for surface preparation, cleanup, or coating removal.
 - c. The Company shall not store in open containers spent or fresh VOC to be used for surface preparation, cleanup, or coating removal.
 - d. The Company shall not use VOC to clean up spray equipment unless equipment is used to collect the cleaning compounds and to minimize their evaporation to the atmosphere.
- 17 All structural and mechanical components of the equipment covered by this permit and in use shall be maintained in proper operating condition.
- 18 Any new Unit Operating System (UOS) shall comply with the requirements of Regulation 24, Section 45, "Industrial Cleaning Solvents."
- 19 This Operating Permit supersedes all operating and construction permits and written exemptions issued prior to the date of this permit.
- 20 This permit expires September 1, 2000. Requests for renewal shall be submitted to the Department no later than sixty (60) days prior to the expiration date of this permit.
- 21 This permit shall be available on the premises.
- 22 Failure to comply with the provisions of this permit shall be grounds for suspension or revocation.

Operating Standards:

- 23 The thermal incinerator associated with the sludge dryer shall operate at a minimum temperature of 1300° Fahrenheit, whenever the sludge dryer is operating.
- 24 The capability to preheat residual fuel oil shall be maintained.
- 25 During all periods of operation, the boilers shall be operated at the highest practical combustion efficiency, but at no time shall the combustion efficiency be less than 75%.
- 26 The combustion chamber set point in all thermal incinerators shall be no less than that during the most recent performance test that demonstrated that the unit was in compliance.
- 27 The operation of the thermal oxidizer for the Powder Anti Chip Oven is optional, but if it is operated during curing of coated vehicles, it shall be operating properly, at a minimum temperature of 1300° Fahrenheit.
- 28 The cyclones shall be on line and operating properly whenever the orbital sanders are operating.
- 29 The Powder Anti Chip Booth shall not be operated without HEPA filters.

Emission Limits and Standards:

Sulfur Content in Residual Fuel Oil:

- 30 The sulfur content of the residual fuel oil used to fire the boilers shall not exceed 1.0 percent by weight.

Particulate Emission Standards:

- 31 Particulate emissions shall not exceed the following limits in Table 3 expressed in grains per dry standard cubic foot (gr/dscf) of exhaust air:

Table 3	
Emission Unit	Particulate Emission Limit (gr/dscf)
Underbody Deadener and Small Parts Paint Booth	0.003
Topcoat Operations	0.02
Black Out Area	0.20
Touch Up Area	0.20
Low Bake and High Bake Operation	0.003

- 32 Air contaminant emission levels from each sanding booth shall not exceed 0.1 pound per hour of particulate matter.

VOC Emission Standards:

LAER LIMIT:

- 33 Topcoat Operations: Upon operation of any of the new topcoat booths listed in Attachment B, the topcoat used shall not emit in excess of 8.45 pounds volatile organic compounds per gallon of applied coating solids on a daily volume weighted basis from the topcoat operation.
- 34 Topcoat Operations: Prior to the operation of the new topcoat booths, the topcoat used shall not emit in excess of 12.26 pounds volatile organic compounds per gallon of applied coating solids on a daily volume weighted basis.
- 35 Topcoat Operations: On or before September 1, 2003, the Company shall begin using powder clearcoat, if it is commercially available, or employ pollution prevention measures sufficient to reduce topcoat VOC emissions to less than seven (7) pounds volatile organic compounds per gallon of applied coating solids on a daily weighted basis until powder clearcoat is commercially available, at which time the Company shall install powder clearcoat as expeditiously as practical. If the Company believes it will not be able to meet this requirement, the Company will submit for DNREC approval, on or before September 1, 2002, a plan and schedule to expeditiously achieve six (6)

PERMIT: APC-95/0569 CONSTRUCTION/OPERATION

CHRYSLER CORPORATION

NEWARK ASSEMBLY PLANT

September 7, 1995

Page 8

pounds volatile organic compounds per gallon of applied coating solids on a daily weighted basis. That plan will become an enforceable requirement of this permit upon DNREC approval of that plan.

NSPS Standard:

- 36 EDP Prime Coat Operation: The coating used in the EDP Prime Coat Operation shall not emit more than 1.34 pounds of volatile organic compounds per gallon of coating (minus water) as applied.

VOC RACT Standards:

- 37 Miscellaneous Metal Parts Coating: The Company shall not cause or allow on any day the application of any air dried coating with VOC content in excess of 3.5 pounds per gallon, excluding water and exempt compounds, as applied, from any miscellaneous metal parts coating.
- 38 Final Repair Operations: The Company shall not cause or allow on any day the application of any coating with VOC content, as applied, that exceeds 4.8 pounds per gallon of coating, excluding water and exempt compounds, as applied, or 34.2 pounds per gallon of applied coating solids from any final repair operation.

Cold Cleaning Solvent Metal Degreasers - WORK PRACTICE STANDARDS

- 39 The cleaners shall be equipped with a cover that is easily operated with one hand for any of the following conditions:
- a. The solvent true vapor pressure is greater than 15 millimeters of Mercury [mm Hg] or 0.3 pound per square inch [psi] measured at 100°F by ASTM D323-89;
 - b. The solvent is agitated; or
 - c. The solvent is heated.
- 40 A permanent label, summarizing the proper operating procedures, shall be posted conspicuously on or near each degreaser.
- 41 Waste solvent shall be stored in covered containers.
- 42 For tanks equipped with covers, the cover shall be closed whenever parts are not being handled in the cleaner.
- 43 The cleaned parts shall be drained until dripping ceases.
- 44 If, at any time, the degreasing operation calls for spraying of solvent, then the spray shall be a solid fluid stream (not a fine, atomized, or shower type spray) at a pressure that does not exceed ten (10) pounds per square inch gauge (psig).
- 45 Porous or absorbent material, such as cloth, leather, wood, or rope shall not be cleaned in any degreaser.
- 46 Solvent leaks shall be repaired immediately.

- 47 All VOC containing spent solvent shall be kept in covered containers when not in use and shall be handled in a manner that will not cause VOCs to be released to the atmosphere.

NO_x RACT STANDARDS:

- 48 For fuel burning equipment with a rated heat capacity of 15 to less than 50 mmbtu/hr, the maximum emission rate shall not exceed those achieved through an annual tune-up performed by qualified personnel. The owner or operator shall maintain a log of the tune-ups performed on each unit.
- 49 During the ozone season (April 1 through October 31 of each year), 90 percent, or more, of the total heat input to each boiler shall be derived from the combustion of natural gas.

COMPLIANCE DETERMINATION:

- 50 The following equation shall be used for determining the daily weighted average VOC content of the coating, as applied.

$$VOC_w = \frac{\sum_{i=1}^n V_i C_i}{V_T}$$

where:

- VOC_w = The daily-weighted average VOC content of the coatings, as applied, used on a coating unit, line, or operation in units of kilograms of VOC per liter of coating (kg VOC/L) (pounds of VOC per gallon of coating [lb VOC/gal]), excluding water and exempt compounds.
- n = The number of different coatings, as applied, each day on a coating unit, line, or operation.
- V_i = The volume of each coating, as applied, each day on a coating unit, line, or operation in units of L (gal), excluding water and exempt compounds.
- C_i = The VOC content of each coating, as applied, each day on a coating unit, line, or operation in units of kg VOC/L of coating (lb VOC/gal), excluding water and exempt compounds.
- V_T = The total volume of all coating, as applied, each day on a coating unit, line, or operation in units of L (gal), excluding water and exempt compounds.

- 51 Topcoat: Compliance with the topcoat limit in Conditions 33, 34, and 35 shall be demonstrated pursuant to the methods and procedures set forth in "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations", EPA-450-3-88-018, dated December 1988, and any subsequent revision approved by the EPA and the State of Delaware Department of Natural Resources and Environmental Control.
- 52 EDP Prime Coat Operation: The Company shall use the procedures in 40 CFR 60.393 (c)(2), for sources complying through the use of capture and control, to determine compliance with the emission limit in Condition 36.

PERMIT: APC-95/0569 CONSTRUCTION/OPERATION

CHRYSLER CORPORATION

NEWARK ASSEMBLY PLANT

September 7, 1995

Page 10

MONITORING REQUIREMENTS:

- 53 The Company shall conduct monitoring related to the facility wide emissions limits established in Conditions 1 and 2 in accordance with the requirements listed under the Recordkeeping Requirements of this permit.
- 54 The Company shall monitor the combustion temperature of all thermal incinerators using continuous temperature monitoring equipment.
- 55 The continuous temperature monitoring equipment and continuous temperature monitoring recorder shall be operating properly at all times the corresponding thermal incinerator is operating. The continuous temperature monitoring equipment shall be calibrated, operated, and maintained according to the vendor's specifications or an alternate method approved by the Department and quality assurance program at all times the corresponding thermal incinerator is operating.
- 56 The continuous temperature monitoring equipment shall be equipped with a continuous recorder and have an accuracy of ± 1 percent of the combustion temperature being measured expressed in degrees Fahrenheit ($^{\circ}\text{F}$) or $\pm 0.5^{\circ}\text{F}$, whichever is greater.

INITIAL CERTIFICATION REQUIREMENTS:

General Provisions:

- 57 Upon startup of a new or modified coating unit, line, or operation, the Company shall certify to the Department in the next required monthly report that the coating unit, line, or operation is in compliance with the requirements of this permit on and after the initial startup date.
- 58 The following minimum information shall be included in each certification submittal to the Department.
- a. The name and location of the facility.
 - b. The address and telephone number of the person responsible for the facility.
 - c. Identification of subject sources.
 - d. The initial startup date.

- 59 The time at which the facility's production "day" begins shall be defined as 5:00 am.

Source Specific Requirements:

- 60 In addition to complying with the General Provision requirements outlined in Conditions 57 through 59, the Company shall submit the following information outlined in Conditions 61 through 65.
- 61 Complying Coatings: The Company shall submit the following information to the Department for Miscellaneous Metal Coating or Final Repair Operations demonstrating compliance through the use of complying coatings:
- a. The name and identification number of each coating, as applied, on each coating unit, line, or operation.

- b. The mass of VOC per volume (excluding water and exempt compounds) and the volume of each coating (excluding water and exempt compounds), as applied per day.

62 Daily Weighted Average: The Company shall submit the following information to the Department for Miscellaneous Metal Coating or Final Repair Operations demonstrating compliance through the use of daily weighted average:

- a. The name and identification number of each coating unit, line, or operation that will comply by means of daily-weighted averaging.
- b. The instrument or method by which the owner or operator will accurately measure or calculate the volume of each coating (excluding water and exempt compounds), as applied, used each day on each coating unit, line, or operation.
- c. The method by which the owner or operator will create and maintain records each day as required in Condition 62 (b).
- d. Calculation of the daily-weighted average, using the procedure in Condition 50 of this permit, for a day representative of current or projected maximum production levels.

63 EDP Prime Coat Operation: The Company shall certify to the Department that the EDP Prime Coat Operation is and will be in compliance with the requirements of Regulation 24 "Control of VOC Emissions", Section 13, "Automobile and Light Duty Truck Coating Operations". Such certification shall include:

- a. A copy of the calculations performed pursuant to 40CFR Part 60, Subpart MM, paragraph 60.393 (c)(2) to demonstrate compliance for the EDP Prime Coat Operation for the month prior to submittal of the certification.
- b. Within 90 days of the on-site testing required under Condition 68 of this permit, the Company shall submit an initial compliance certification report including the following information to the Department:
 - i. Volume weighted average mass of VOC per volume of applied coating solids.
 - ii. Combustion temperature of the thermal incinerator
 - iii. Total mass of VOC per volume of applied coating solids before and after incinerator
 - iv. Capture efficiency
 - v. Destruction efficiency of the incinerator
 - vi. Description of the method used to establish the fraction of VOC captured and sent to the thermal incinerator.

64 Topcoat Certification: The Company shall submit the following compliance certification to the Department:

- a. A detailed proposal specifying the method of demonstrating how the compliance test will be conducted according to the topcoat protocol in accordance with the time frames listed in Condition 67.
- b. Within 90 days of the on-site testing required under Condition 69 of this permit, the Company shall submit an initial compliance certification report including the following information to the Department:
 - i. Volume weighted average mass of VOC per volume of applied coating solids.

PERMIT: APC-95/0569 CONSTRUCTION/OPERATION

CHRYSLER CORPORATION

NEWARK ASSEMBLY PLANT

September 7, 1995

Page 12

- ii. Combustion temperature of the thermal incinerator
- iii. Total mass of VOC per volume of applied coating solids before and after incinerator
- iv. Capture efficiency
- v. Destruction efficiency of the incinerator
- vi. Description of the method used to establish the fraction of VOC captured and sent to the thermal incinerator.

65 Solvent Metal Degreasers: The Company shall submit the following information certifying compliance for the solvent metal degreasers:

- a. The applicable work practice.
- b. The method of compliance.
- c. Certification that each subject source at the facility is in compliance with the applicable work practice.

Annual Certification:

66 The Company shall certify to the Department within ninety (90) days of the end of each calendar year that the facility is in compliance with the PAL provisions, permit conditions, and the plant wide emission limits, both annual and short term. This certification shall, at a minimum, include the following information:

General Provisions:

- a. The name and location of the facility.
- b. The address and telephone number of the person responsible for the facility.

PAL Provisions:

- c. The Plantwide Emission on an annual basis for the previous year compared to the annual Plantwide Emission Limit in Condition 1.
- d. A listing of pre-approved changes made at the facility for the previous year with the associated emissions.
- e. A summary of Pollution Prevention projects at the facility and the reduction in emissions, if applicable.

Topcoat Operations:

- f. The amount of VOCs emitted on an annual basis (tons per year) from the Topcoat Operations.

EDP Prime Coat Operations:

- g. The amount of VOCs emitted on an annual basis (tons per year) from the EDP Prime Coat Operation.

Miscellaneous Metal Coating Operations:

- h. The amount of VOCs emitted on an annual basis (tons per year) from all Miscellaneous Metal Coating Operations.

Industrial Cleaning Solvents:

- i. The tons VOC emissions resulting from solvent used during the previous calendar year and a copy of the calculations that were performed to estimate the amounts.
- j. A certification that the source is in compliance with Regulation 24, Section 45, "Industrial Cleaning Solvents."

Fuel Usage:

- k. The amount of residual fuel oil and natural gas burned in each calendar month for the five boilers.
- l. The amount of natural gas burned each calendar month for plantwide sources (not including the boilers).

TESTING REQUIREMENTS:

- 67 General Provisions: Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial startup of such facility, the owner or operator shall conduct performance test(s) and furnish the Department with a written report of the results of such performance test(s). A pre-test protocol shall be submitted at least thirty (30) days in advance of the test date. The tests shall be conducted in accordance with the State of Delaware and Federal requirements. The owner or operator shall provide the Department with at least 30 days prior notice of any performance test to afford the Department the opportunity to have an observer present. Upon approval by the Department, the Company may proceed with the compliance demonstration. The results of the testing shall be submitted to the Department within 90 days of the test completion. The results must demonstrate to the Department's satisfaction that the emission unit is operating in compliance with the applicable regulations and conditions of this permit.
- 68 EDP Prime Coat Operation: The Company shall conduct an initial performance test for the EDP Prime Coat Operation in accordance with Condition 67.
- 69 Topcoating Line: The Company shall submit to the Department a detailed proposal specifying the method of demonstrating how the compliance test will be conducted according to the topcoat protocol and Condition 67. The proposal shall include:
- a. a comprehensive plan (including a rationale) for determining the transfer efficiency at each booth using in plant or pilot testing,
 - b. the selection of coatings to be tested (to determine transfer efficiency), including a rationale for coating groupings, and
 - c. a method for tracking coating usage during the transfer efficiency test.

- 70 The Department reserves the right to require additional testing to demonstrate compliance or establish emission rates for any of the emission units covered by this permit.

RECORDKEEPING REQUIREMENTS:

General Provisions:

- 71 The owner or operator shall maintain all of the records necessary to demonstrate compliance with

PERMIT: APC-95/0569 CONSTRUCTION/OPERATION
CHRYSLER CORPORATION
NEWARK ASSEMBLY PLANT
September 7, 1995
Page 14

this permit at the facility for a period of five (5) years. These records shall be made available to the Department upon request.

Source Specific Requirements:

72 Complying Coatings: The Company shall collect and record the following information for each coating unit, line, or operation complying through the use of complying coatings:

- a. The name and identification number of each coating, as applied, on each coating unit, line, or operation.
- b. The mass of VOC per volume of each coating (excluding water and exempt compounds), as applied, used each day on each coating unit, line, or operation.
- c. The volume of each coating applied each day on each coating unit line or operation.

73 Daily Weighted Average: The Company shall collect and record the following information for coating sources complying through the use of daily weighted averaging:

- a. The name and identification number of each coating, as applied, on each coating unit, line, or operation.
- b. The mass of VOC per volume of each coating (excluding water and exempt compounds), as applied, used each day on each coating unit, line, or operation.
- c. The volume of each coating applied each day on each coating unit line or operation.
- d. The daily-weighted average VOC content of all coatings, as applied, on each coating unit, line, or operation calculated according to the procedure in Condition 50 of this permit.

74 EDP Prime Coat Operation: The owner or operator shall collect and record the following information for each EDP Prime Coat Operation:

- a. For each day, the total daily volume of coating solids that is added to the EDP system.
- b. For each month, the calculations used in the compliance determinations specified in 40 CFR 60.393 (c)(2).
- c. Control device monitoring data.
- d. A log of operating time for the capture system, control device, monitoring equipment, and the associated coating unit, line, or operation.
- e. A maintenance log for the capture system, control device, and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.
- f. For thermal incinerators, all 3-hour periods of operation in which the average combustion temperature was more than 50° Fahrenheit below the average combustion temperature during the most recent performance test that demonstrated that the facility was in compliance. The combustion chamber set-point shall be no less than that during the most recent performance test that demonstrated that the facility was in compliance.

75 Topcoat Recordkeeping: The Company shall maintain and record the following information:

- a. All test results, data, and calculations used to determine VOC emissions from the topcoat operation according to the Topcoat Protocol.
- b. Control device monitoring data.

**PERMIT: APC-95/0569 CONSTRUCTION/OPERATION
CHRYSLER CORPORATION
NEWARK ASSEMBLY PLANT**

September 7, 1995

Page 15

- c. A log of operating time for the capture system, control device, monitoring equipment, and the associated coating unit, line, or operation.
- d. A maintenance log for the capture system, control device, and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.
- e. For thermal incinerators, all 3-hour periods of operation in which the average combustion temperature was more than 50° Fahrenheit below the average combustion temperature during the most recent performance test that demonstrated that the facility was in compliance. The combustion chamber set-point shall be no less than that during the most recent performance test that demonstrated that the facility was in compliance.

76 Industrial Cleanup Solvents: The Company shall maintain the following records of organic solvent usage for each Unit Operating System (UOS):

- a. Detailed records of organic solvent usage for each UOS in accordance with the requirements listed in Regulation 24, Section 45, "Industrial Cleaning Solvents", paragraph (c).
- b. Monthly organic solvent usage.
- c. Monthly VOC emission calculations for each UOS.

77 Notifications: The Company shall record changes in the method of compliance from complying coatings or daily weighted average to a different method (complying coatings or daily weighted average). This record shall include information required in the Certification Requirements of this permit. If the Company is changing from complying coatings or daily weighted average to a control device, the Company shall submit a test protocol in accordance with the Testing Requirements of this permit. This notification shall be reported in the next report required under Condition 86.

Fuel Usage Records:

78 The Company shall maintain an up to date record of fuel oil shipments and pertinent information regarding the shipment to include:

- a. supplier,
- b. date each shipment received,
- c. quantity of oil received per each shipment,
- d. type oil,
- e. whether the oil shipment was sampled for sulfur content,
- f. sulfur analysis results, and
- g. the method used to determine the sulfur content of the oil.

79 The Company shall maintain a record of the amount of residual fuel oil and natural gas used in the five boilers and the amount of natural gas used plantwide for each calendar month.

PAL Provisions:

80 Plantwide and Daily VOC and NO_x Emission Limits: By the last day of any month, the Company shall calculate and record the plantwide and daily VOC and NO_x emissions for the previous calendar month. This calculation shall take into account any changes made including Pre-Approved Changes,

Pollution Prevention Projects, and changes in compliance determination.

- 81 Pre-Approved Changes: The Company shall maintain adequate records of the changes made at the facility under Condition 5 so as to ensure proper recordkeeping and reporting of emissions. Calculations based on material balances, emissions factors and test data used to ensure and demonstrate that the emissions limits in Conditions 1 and 2 are not exceeded shall reflect such changes and shall be maintained for a period of five (5) years. Changes under Condition 5(b) shall be those pre-approved changes recorded and reported pursuant to Conditions 6, 66, and 86.

REPORTING REQUIREMENTS:

General Provisions:

- 82 The Company shall send one (1) copy of the reports required to each of the following addresses:

Air Quality Management Section Division of Air and Waste Management P. O. Box. 1401 Dover, DE 19903	Air Quality Management Section Division of Air and Waste Management 715 Grantham Lane New Castle, DE 19720
--	---

Excess Emission Reports

For Solvent Metal Degreasers and Fuel Burning Equipment:

- 83 The Company shall, for each occurrence of excess emissions, within thirty (30) calendar days of becoming aware of such occurrence, supply the Department in writing with the following information, in addition to complying with Condition 12 of this permit and any other reporting requirements mandated by the State of Delaware:
- The name and location of the facility;
 - The subject source(s) that caused the excess emissions;
 - The time and date of first observation of the excess emissions;
 - The cause and expected duration of the excess emissions; and
 - The proposed corrective action(s) and schedule to correct the condition(s) causing the excess emissions.

Excess Emission Reports

For Coating Sources:

- 84 The Company shall, for each occurrence of noncompliance with the emission standards in Conditions 33 through 38, within thirty (30) calendar days of becoming aware of such occurrence, supply the Department with a copy of the record, in addition to complying with Condition 12 of this permit and any other reporting requirements mandated by the State of Delaware.
- 85 For the thermal incinerators that are required under this permit, every three hour period during which the average temperature measured is more than 50° Fahrenheit less than the most recent

PERMIT: APC-95/0569 CONSTRUCTION/OPERATION
CHRYSLER CORPORATION
NEWARK ASSEMBLY PLANT
September 7, 1995
Page 17

control device performance test at which the destruction efficiency was determined shall be reported to the Department within thirty (30) calendar days. If no such period occurs, the Company shall submit a negative report every six months stating this.

PAL Provisions:

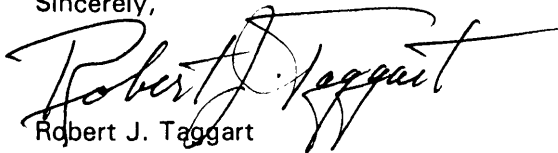
86 For the third quarter of 1995, the Company shall submit its current quarterly VOC emissions report within thirty (30) days of the end of the quarter. Within sixty (60) days of the end of 1995, the Company shall submit a report containing the following information for all full months in 1995 in which this permit was in effect. Beginning with reporting for January of 1996, the Company shall submit, within thirty (30) days of the end of each month, a report containing the following information:

- a. Plantwide VOC and NO_x emissions in tons for the previous twelve months, with the accumulation of emissions for this purpose beginning with the first full day in which this permit is in effect.
- b. Plantwide daily VOC and NO_x Emissions in pounds per day.
- c. A list of pre-approved changes made during the previous calendar month recorded pursuant to Condition 6 of this permit.
- d. Certifications for pre-approved changes in accordance with Conditions 57 through 65 of this permit.
- e. Certifications for changes in the method of compliance in accordance with the Certification Requirements and Condition 77 of this permit.
- f. The plans, specifications, and as-built plans as updated.

PERMIT PERFORMANCE REVIEW:

87 Within 12 months of the issuance of this permit, the Company shall submit an outline of data and performance issues to be addressed in the Company/DNREC joint review of the PAL permit. Within 15 months of the issuance of this permit, the Company and DNREC will conduct a joint review of the effectiveness and efficiency of this permit in its first twelve months and develop a joint review on ways in which the PAL permit can be improved.

Sincerely,



Robert J. Taggart
Program Manager
Engineering & Compliance Branch

RJT:AM:AHD
AHD95067

pc: Darryl D. Tyler
Ali Mirzakhaili
Andrea H. Danucalov

Attachment "A"

Determination of Short Term and Annual Plantwide NO_x Emission Limits

The short term and annual Plantwide NO_x emission limits shall be determined by the Company as outlined below and submitted to the Department by December 15, 1995. The Department shall establish a short term and annual Plantwide NO_x emission limits by January 15, 1996. Fuel usages for the Topcoat Incinerators and EDP Prime Coat Incinerators are presumed not to exceed 80x10⁶ ft³ and 163 x 10⁶ ft³ annually, respectively. Any test result that indicates higher fuel usage shall be sufficiently documented by the Company in order for the Department to verify its accuracy. The Company shall also provide explanation for any exceedance from the presumed maximum fuel usages. The Department reserves the right to require a public hearing prior to accepting the increased fuel usage and issuance of the final approval of the short term limit and PAL for NO_x.

- A1. The Company shall test the EDP Prime Coat Incinerators in accordance with Department approved protocol by November 1, 1995.
- A2. The Company shall submit a final report including the results of the testing and the proposed emission factor, both short and long term, for NO_x to the Department by December 15, 1995.
- A3. The Company shall submit a final report of the results of the Topcoat Incinerators' testing done in June, 1995 by October 1, 1995.
- A4. The Company shall use the following procedures to calculate the Annual Plantwide NO_x Emission Limit as required by Condition No. 1 of the permit.

Annual Topcoat Incinerator Emission Rate, Equation No. 1:

$$TC_{NO_x} = \frac{[((\frac{EF_{TC_{93}} + EF_{TC_{95}}}{2}) * Fuel_{TC}) + (0.14 * (80 - Fuel_{TC}))] * 1040 \frac{btu}{ft^3}}{2000 \frac{lb}{ton} * 10^6 \frac{btu}{mmbtu}}$$

where:

- TC_{NO_x} = Annual Topcoat NO_x Emission Limit, ton per year
- EF_{TC₉₃} = Emission Factor for Topcoat based on 1993 test results, lb/10⁶ btu
- EF_{TC₉₅} = Emission Factor for Topcoat based on 1995 test results, lb/10⁶ btu
- Fuel_{TC} = Annual Amount of Natural Gas used in the Topcoat Incinerators, 10⁶ ft³/yr.

Annual EDP Prime Coat Incinerators Emission Rate, Equation No. 2:

$$F_x = Fuel_{EDP_x} * 4500 \frac{hrs}{yr}$$

$$F_y = Fuel_{EDP_y} * 2500 \frac{hrs}{yr}$$

$$EDP_{NO_x} = \frac{[(EF_{EDP_x} * F_x) + (EF_{EDP_y} * F_y) + (0.14 * (163 - F_x - F_y))] * 1040 \frac{btu}{ft^3}}{2000 \frac{lb}{ton} * 10^6 \frac{btu}{mmbtu}}$$

where:

- EDP_{NO_x} = Annual NO_x Emissions from EDP Prime Coat Operation, tpy
- EF_{EDP_x} = Emission Factor for EDP Prime Coat Operation during vehicle coating periods, lb/10⁶ btu
- Fuel_{EDP_x} = Hourly Gas Usage during vehicle coating periods, 10⁶ ft³/hr
- EF_{EDP_y} = Emission Factor for EDP Prime Coat Operation during non vehicle coating periods, lb/10⁶ btu
- Fuel_{EDP_y} = Hourly Gas Usage during non vehicle coating periods, 10⁶ ft³/hr

Plantwide Annual NO_x Emission Limit, Equation No. 3:

$$PAL_{NO_x} = 100.97 + TC_{NO_x} + EDP_{NO_x}$$

where:

- PAL_{NO_x} = Plantwide Annual NO_x Emission Limit, tpy

PERMIT: APC-95/0569 CONSTRUCTION/OPERATION

CHRYSLER CORPORATION

NEWARK ASSEMBLY PLANT

September 7, 1995

Page 20

- A5. The Company shall use the following procedures to calculate the short term Plantwide NO_x Emission Limit as required by Condition No. 2 of the permit.

Monthly EDP Prime Coat Incinerators Emission Rate, Equation No. 4:

$$EDP_{NO_{xm}} = \frac{[(EF_{EDP_x} * Fuel_{EDP_{xm}}) + (EF_{EDP_y} * Fuel_{EDP_{ym}}) + (0.14 * (13.11 - Fuel_{EDP_{xm}} - Fuel_{EDP_{ym}})) * 1040 \frac{btu}{ft^3}]}{2000 \frac{lb}{ton} * 10^6 \frac{btu}{mmbtu}}$$

where:

Monthly_{NO_{xm}} = Monthly Plantwide NO_x Emissions, tons per month

EF_{EDP_x} = Emission Factor for the EDP Prime Coat Operation during vehicle coating periods, lb/10⁶ btu

FUEL_{EDP_{xm}} = Monthly Fuel Usage for the EDP Prime Coat Operation during vehicle coating periods, 10⁶ ft³/month

EF_{EDP_y} = Emission Factor for the EDP Prime Coat Operation during non vehicle coating periods, lb/10⁶ btu

FUEL_{EDP_{ym}} = Monthly Fuel Usage for the EDP Prime Coat Operation during non vehicle coating periods, 10⁶ ft³/month

Daily NO_x Emission Limit, Equation No. 5:

$$Daily_{NO_x} = \frac{23.3 + EDP_{NO_{xm}}}{31 \frac{days}{month}}$$

where:

Daily_{NO_x} = Daily NO_x Emission Limit, tons per day

Attachment "B"

Construction Approved by the Department

Phosphate Bath
EDP Prime Coat Operation with Oven and Thermal Incinerator
Powder Anti Chip Booth with Oven and Thermal Incinerator
Color #1 Booth with Oven and Thermal Incinerator
Color #2 Booth with Oven and Thermal Incinerator
Sanding Areas
Underbody Body Sealer Deck
Manual Sealer Deck
Deadener Pad Installation Area
Solvent Wipe
UV Inspection Booth
Powder Tack Off
Air Supply Houses
Spot Repair Areas

PERMIT: APC-95/0569 CONSTRUCTION/OPERATION
CHRYSLER CORPORATION
NEWARK ASSEMBLY PLANT
September 7, 1995

INDEX	
Emissions Unit and Pollution Control Device Identification	1
Plant Site Emission Limits	3
PAL Provisions: Pre-Approved Changes Pollution Prevention MACT Standards	3
General Provisions	5
Operating Standards	6
Emissions Limits and Standards Sulfur Content of Residual Fuel Oil Particulate Standards VOC Standards: LAER Standards NSPS Standards VOC RACT Standards & Work Practice Standards NO_x RACT Standards	7
Compliance Determination Daily Weighted Average Topcoat Operations EDP Prime Coat Operation	9
Monitoring Requirements	10
Certification Requirements Initial Certification Annual Certification	10
Testing Requirements	13
Recordkeeping Requirements	13
Reporting Requirements	16
Permit Performance Review	17
Attachment A - Determination of Short Term and Annual Plantwide NO_x Emission Limits	18
Attachment B - Approved Construction/Relocation	21