

SUPPLEMENT TO PERMIT NO. 112-98

Loudon Steel  
Millington, Michigan

June 15, 1998

GENERAL CONDITIONS

1. Rule 201(1) - The process or process equipment covered by this permit shall not be reconstructed, relocated, altered, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule.
2. Rule 201(4) - If the installation, reconstruction, relocation, or alteration of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the person to whom this permit was issued, or the designated authorized agent, shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or alteration of the equipment allowed by this Permit to Install.
3. Rule 201(6)(a) - If this Permit to Install is issued for a process or process equipment located at a stationary source that is subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, trial operation is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install and until the appropriate terms and conditions of this Permit to Install have been incorporated into the Renewable Operating Permit. Upon incorporation of the appropriate terms and conditions into the Renewable Operating Permit, this Permit to Install shall become void.
4. Rules 201(6)(b) - If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install.
5. Rule 201(8) and Section 5510 of Act 451, P.A. 1994 - The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Departments' rules or the Clean Air Act.
6. Rule 219 - The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b) and (c) of R 336.1219. The written request shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality.

7. Rule 901 - Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property.
8. Rule 912 - The owner or operator of a source, process, or process equipment shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant in excess of standards for more than one hour, or of any air contaminant in excess of standards for more than two hours, as required in this rule, to the District Supervisor, Air Quality Division. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the District Supervisor within 10 days, with the information required in this rule.
9. Approval of this permit does not exempt the person to whom this permit was issued from complying with any future applicable requirements which may be promulgated under Part 55 of Act 451, P.A. 1994 or the Clean Air Act.
10. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
11. Operation of this equipment may be subject to other requirements of Part 55 of Act 451, P.A. 1994, and the rules promulgated thereunder.
12. Rule 301 - Except as provided in subrules (2) and (3) or unless the special conditions of this Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303.
  - a) A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) visible emission limit specified as a special condition of this permit to install.
13. Rule 370 - Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2).

### SPECIAL CONDITIONS

14. The volatile organic compound (VOC) emission rate from the prime booth portion of the metal parts coating line, hereinafter "primer booth," shall not exceed 9.3 pounds per hour nor 5.2 tons per year based upon a 12-month rolling time period as determined at the end of each calendar month.
15. The VOC emission rate from the topcoat portion of the metal parts coating line, hereinafter "topcoat booth," shall not exceed 11.0 pounds per hour nor 8.4 tons per year based upon a 12-month rolling time period as determined at the end of each calendar month.
16. The VOC emission rate from the dipcoat process used to coat metal parts shall not exceed 6.9 pounds per hour nor 1.5 tons per year based upon a 12-month rolling time period as determined at the end of each calendar month.
17. The VOC content for any coating used in the topcoat, primer, or dipcoat processes in the metal parts coating line shall not exceed 3.47 pounds per gallon of coating (minus water) as applied.
18. The hazardous air pollutant (HAP) emissions, as defined pursuant to section 112(b) of the Clean Air Act, shall be less than 9 tons per year for any individual HAP and 15.1 tons per year for any combination of HAPs at this stationary source. This annual limit shall be based upon a 12-month rolling time period as determined at the end of each calendar month.
19. Rules 1001, 1003 and 1004 - Verification of VOC emission rates from the metal parts coating line by testing, at owner's expense, in accordance with Department requirements, may be required. The testing shall be conducted within 60 days following the receipt of the written notification of the requirement. Verification of emission rates includes the submittal of a complete report of the test results. If testing is required, a complete test plan must be submitted to the Air Quality Division. The final plan must be approved by the Division prior to testing and a complete report of test results must be submitted to the Division within 60 days following the last date of testing.
20. The applicant shall not operate either of the paint spray booths unless all exhaust filters are in place and operating properly.
21. Applicant shall equip and maintain the paint dip tank with a cover which shall be closed whenever the tank is not in use.
22. The applicant shall calculate the VOC emissions from each paint spray booth using the method detailed in Appendix A and for the dipcoat tank using the method detailed in Appendix B. Also, the applicant shall maintain a separate record for each calendar month of the following information for each paint booth and the diptank:

- A. For each coating used:
  - 1. The identification of the coating.
  - 2. The amount, in gallons, used (with water).
  - 3. The VOC content in pounds per gallon of coating (minus water and with water) as applied.
- B. VOC emissions calculations determining monthly VOC emission rates in tons per month.
- C. VOC emissions calculations determining a 12-month rolling time period emission rate in tons per year.
- D. Total hours of operation of each of the paint spray booths and the dip tank.
- E. Monthly calculations of the following for all HAPs for all processes at the facility:
  - 1. Monthly calculation of individual HAP emission rate in tons per month.
  - 2. Monthly calculation of aggregate HAPs emission rate in tons per month.
  - 3. Monthly calculation of individual HAPs determining a 12-month rolling time period emission rate in tons per year.
  - 4. Monthly calculation of aggregate HAPs determining a 12-month rolling time period emission rate in tons per year.

All records and calculations shall be kept on file for a period of at least two years and made available to the Air Quality Division upon request.

- 23. There shall be no volatile organic compounds (VOCs) contained in any wash solvent and/or solution used in the metal parts coating process.

24. The exhaust gases from the coating process shall be discharged unobstructed vertically upwards to the ambient air from stacks with the following parameters:

<u>Stack ID</u>	<u>Maximum Diameter, in.</u>	<u>Maximum Ht. above Ground, ft</u>
Parts Washer	16	46
Prime Booth	44	46
Topcoat Booth	44	46
Oven	16	46

Appendix A

VOC's from 2 coating processes

Company: Loudon Steel  
 Permit no. 112-98

Month/year

Process No.1	A	B	C	D	E = A x B
Primer	Actual gallons used (with water)	Lbs VOC per gallon (with water)	Actual gallons used (minus water)	Lbs VOC per gallon (minus water)	Lbs of VOC
Coating					

Total gallons minus water used = F = Sum of all C's F  Sum of all E's---->

Average VOC content (lbs VOC/gal coating-water) = G = Sum of all E's/F G

Coating VOC limit, pounds per gallon (minus water)=H. G can = H or < H H

Total tons VOC emitted from coatings = J = Sum of all E's/2000 J

12 month rolling time period emissions in tons = AA = (total of 11 previous months + J) AA

12 month rolling time period limit (tons) = BB, AA can =BB or <BB BB

Process No.2	K	L	M	N	P = K x L
Topcoat	Actual gallons used (with water)	Lbs VOC per gallon (with water)	Actual gallons used (minus water)	Lbs VOC per gallon (minus water)	Lbs of VOC
Coating					

Total gallons minus water used = Q = Sum of all M's Q  Sum of all P's---->

Average VOC content (lbs VOC/gal coating-water) = R = Sum of all P's/Q R

Coating VOC limit, pounds per gallon (minus water) = S. R can = S or < S S

Total tons VOC emitted from coatings = T = Sum of all P's/2000 T

12 month rolling time period emissions in tons = CC =(total of 11 previous months + T) CC

12 month rolling time period limit (tons) = DD, CC can =DD or <DD DD

