Texas Commission on Environmental Quality Air Permits Division

New Source Review (NSR) Boiler Plate Special Conditions

This information is maintained by the Mechanical/Agricultural/Construction NSR Section and is subject to change. Last update was made **October 2006**. These special conditions represent current NSR boiler plate guidelines and are provided for informational purposes only. The special conditions for any permit or amendment are subject to change through TCEQ case by case evaluation procedures [30 TAC 116.111(a)]. Please contact the appropriate Mechanical/Agricultural/Construction NSR Section management if there are questions related to the boiler plate guidelines.

Metal Spraying Facilities

EMISSION STANDARDS

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission limits and other conditions specified in the table.

FUEL SPECIFICATIONS

2. Fuel for the spray gun shall be acetylene, kerosene, propane, propylene, or hydrogen. Use of any other fuel for normal operation or standby purposes will require prior approval of the Executive Director of the Texas Commission on Environmental Quality (TCEQ). [Select applicable fuel or delete condition entirely if electric arc is used]

OPACITY / VISIBLE EMISSION LIMITATIONS

- 3. In accordance with the U.S. Environmental Protection Agency (EPA) Test Method (TM) 9 or equivalent, and except for those periods described in Title 30 Texas Administrative Code (30 TAC) §§ 101.201 and 101.211, opacity of emissions from Emission Point No. # (*insert spray gun stack EPN*) shall not exceed 5 percent averaged over a six-minute period.
- 4. There shall be no visible emissions from the building. Visible emissions shall be determined by a standard of no visible emissions exceeding 30 seconds in duration in any six-minute period as determined using EPA TM 22 or equivalent.

OPERATIONAL LIMITATIONS, WORK PRACTICES, AND PLANT DESIGN

5. Spraying operations shall be limited to an operating schedule of ## hours per day, # days/week, ## weeks/year, and ## hours/year.

SPECIAL CONDITIONS Metal Spraying Facilities Page 2

- 6. The spraying operations shall not exceed ## pounds per hour and ## tons per year of rod/powder usage.
- 7. All spraying operations are limited to the use of one spray gun at a time.
- 8. All spraying operations shall take place in a totally enclosed booth maintained under negative pressure.
- 9. The emission capture hood shall be vented to a cartridge type filter system designed to meet an outlet grain loading not to exceed 0.01 grain per dry standard cubic foot of exhaust. The cartridge filter exhaust stack shall not be equipped with a rain cap and shall be exhausted vertically. [As indicated by modeling results, add the following:] The exhaust stack shall be a minimum of ## feet above ground level and at least ## feet above the highest point of the building. A minimum and maximum pressure drop shall be maintained at (or above) # and below #. [Specific values to be determined during permit review based on manufacturer's specifications.] The baghouse cleaning mechanism shall be activated whenever the pressure exceeds ## inches of water.
- 10. The maximum percentage of each constituent (*specific to proposed process*) listed in the table below shall not be exceeded for any wire or powder product. Wire or powder products containing constituents not listed below shall not be used without prior approval from the TCEQ.

Iron	##	Niobium	##	Quartz	##
Chromium	##	Silicon	##	Manganese	##
Boron	##	Silicate/Talc	##		

- 11. The cartridge filters removed from any particulate filter system shall be disposed of in such a manner that will prevent dust from becoming airborne and shall be stored in sealed containers until removed from the site.
- 12. All spills of powdered metal spray shall be cleaned up immediately and the waste materials shall be stored in sealed containers until removed from the site.
- 13. All hooding, duct, and collection systems shall be effective in capturing emissions from the intended equipment and in preventing fugitive emissions from the building. The hooding and duct system shall be maintained free of holes, cracks, and other conditions that would reduce the collection efficiency of the emissions capture system.

MONITORING

SPECIAL CONDITIONS Metal Spraying Facilities Page 3

14. The holder of this permit shall install, calibrate, and maintain a device to monitor pressure drop in the cartridge filter system. The monitoring device shall be calibrated in accordance with the manufacturer's specifications and shall be calibrated at least annually and shall be accurate to within a range of ± 0.5 inches water gauge pressure (± 125 pascals); or a span of $\pm 0.5\%$.

Pressure drop readings shall be recorded at least once per day during metal spraying operations. If the filter system operating performance parameters are outside of the manufacturer's recommended normal operating range, the spray booths shall not be used until the abatement equipment is repaired. No spraying operation shall be conducted without a properly operating abatement system.

- 15. The TCEQ Regional Office shall be notified as soon as possible after the discovery of any monitor malfunction, which is expected to result in more than 24 hours of lost data. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director in case of extended monitor downtime. Necessary corrective action shall be taken if the downtime exceeds 10 percent of the *(emissions source name)* operating hours in the quarter. Failure to complete any corrective action as directed by the TCEQ Regional Office may be deemed a violation of the permit.
- 16. The holder of this permit shall perform monthly inspections to verify proper operation of all hooding, duct, and collection systems and to verify there are no holes, cracks, and/or other conditions that would reduce the collection efficiency of the emission capture system as represented. If the results of the inspections indicate that the capture system is not operating properly or is not achieving the represented collection efficiency, the permit holder shall promptly take necessary corrective actions.
- 17. Upon request by the Executive Director of the TCEQ, the holder of this permit shall perform stack sampling, ambient air monitoring, or other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere.

RECORDKEEPING REQUIREMENTS

- 18. The following records shall be maintained at this facility and made available upon the request of personnel from the TCEQ or any other air pollution control program having jurisdiction. These records shall be retained for a rolling 5-year period.
 - A. For all spray operations:
 - (1) Daily records of the type of rod and/or powder being sprayed;
 - (2) Monthly records of the amount (in lbs) of rod and/or powder being sprayed; and
 - (3) Actual hours sprayed, summarized monthly.

- B. Daily cartridge filter system pressure drop readings.
- C. Preventative maintenance, scheduled maintenance, and repairs performed on any abatement device shall be recorded as they occur.
- D. Inspections of capture systems and abatement devices shall be recorded as they occur.
- E. Material Safety Data Sheets for each wire or powder product used.