

ATTACHMENT A
SUMMARY OF PROPOSAL

Proposed Rule 1430 – Control of Emissions from Metal Grinding Operations at Metal Forging Facilities

Prohibition on Outdoor Grinding

- Effective date of rule adoption, metal forging facilities are prohibited from conducting any metal grinding or metal cutting operations in the open

Total Enclosures

- Conduct metal grinding or metal cutting in a total enclosure that minimizes the release of fugitive dust emissions from passage, doorways, and bay doors:
 - No later than 12 months if constructing a new building for total enclosure
 - No later than 6 months if modifying an existing structure to be a total enclosure
 - Conduct additional, enhanced housekeeping measures until total enclosure is completed
- Monthly inspection of total enclosures and conduct repairs within 72 hours; immediate stoppage of work if total enclosure results in fugitive dust emissions
- Total enclosure with negative air required for facilities located:
 - Within 500 feet of a sensitive receptor or 1,000 feet of a school
 - Install no later than 6 months after Permit to Operate issued

Interim Requirements

- Facilities that are currently grinding in the open must conduct metal grinding operations within a temporary enclosure or a building
- Until total enclosures are constructed, additional housekeeping provisions are required

Metal Grinding and Cutting Emission Requirements

- Vent emissions to an emission control device that meets a PM outlet concentration limit of 0.002 grains/dry standard cubic feet
- Final stage of control for emission control devices shall be fitted with filter media rated at a minimum 99.97% control efficiency for 0.3 micron particles (HEPA)
 - Alternatively meet 98% if facility demonstrates lower volume of metal grinding and toxic emissions less than Rule 1401 screening levels
- Emission control devices must meet design and operation standards in order to ensure proper ventilation for capture of emissions
- Conduct metal grinding and metal cutting operations in effective zones of collection

Housekeeping Requirements

- Semi-annual cleaning of roof tops of total enclosures
- Monthly wet cleaning or HEPA vacuuming of floors of a building or total enclosures areas where metal grinding or metal cutting operations occur
- Daily wet cleaning or HEPA vacuuming within 20 feet of metal grinding workstations, entrances/exits of enclosures, and emission control devices
- Storage of all materials capable of generating metal fugitive dust in sealed containers

unless stored in total enclosure

- Prohibition of compressed air cleaning or dry sweeping within 30 feet of metal grinding and cutting operations unless conducted under an emission control device

Source Testing

- Conduct PM emission source test once every 12 months
 - Once every 24 months if most recent source test results show less than 50% of PM emission standard
- Conduct multiple metals and hexavalent chromium source test once every 48 months
 - Can forego hexavalent chromium source testing if all baghouse catch samples at change out show a total chromium concentration of < 1% by weight
- Additional PM, multi-metals, and possibly hexavalent chromium source testing if HEPA monitoring requirements are triggered (See Monitoring for HEPA filter)

Monitoring

- Maintain a Bag Leak Detection System pursuant to SCAQMD Rule 1155
- Measure by static duct pressure of hood once per operating day
- Conduct a smoke test once every 3 months
- Continuously monitor and log pressure changes across the HEPA filter
 - Must conduct additional source tests within 60 days if monitored pressure exceeds acceptable ranges for a 4-hour period on three or more separate days over any consecutive 60 days, or any consecutive 24-hour period

Recordkeeping

- Monthly records of metal waste collected by baghouse and housekeeping activities
- Maintain records of when bags/filters are replaced
- Maintain records of all total enclosure inspections, smoke tests, emission control device inspection and maintenance, housekeeping activities, maintenance and repair activities
- Maintain log of calls received regarding odors or air quality related issues

Signage

- Install facility sign providing contact information for SCAQMD and the facility for the reporting of air quality issues

Odor Contingency Measures

- Implement odor reducing measures after receiving 4 confirmed odor complaints within a consecutive 6-month period:
 - Operational or process changes to reduce odors (within 60 days)
 - Enhancements to a temporary enclosure, building, or total enclosure (within 90 days)
 - Other measures or modifications, approved by the Executive Officer, to reduce or minimize odors (schedule approved by the Executive Officer)

Rule 219 Exemption

- Metal grinding or metal cutting operations and associated emission control devices shall no longer be exempt from requirements of a written permit

ATTACHMENT B
KEY ISSUES AND RESPONSES

Proposed Rule (PR) 1430 – Control of Emissions from Metal Grinding Operations at Metal Forging Facilities

Air Pollution Controls Required by PR 1430: A metal forging facility subject to PR 1430 has commented that the cost to install air pollution controls to comply with PR 1430 would be burdensome and potentially result in the facility closing.

- SCAQMD staff has conducted a site visit at the facility and met with the facility operator to discuss the provisions of PR 1430 and the need for air pollution controls on metal grinding operations at forging facilities.
- The facility is conducting a swing grinding and hand grinding operation outside of a building enclosure with no air pollution controls
- SCAQMD staff estimated that the capital cost for the facility to comply with PR 1430 is approximately \$340,000. The estimated capital cost for the facility to comply with PR 1430 includes, construction of an enclosure, installation of an air pollution control device, and the purchase of proper housekeeping equipment.
- The estimated capital cost for the facility is disproportionately higher than other facilities with similar size metal grinding operations, because, unlike most metal forging facilities the facility's grinding operation is both completely uncontrolled and lacks a building enclosure. If the facility had an enclosure the estimated capital cost would be substantially reduced to approximately \$180,000
- Staff's estimated capital cost assumes the facility will construct a new structure. The SCAQMD staff clarified to the facility that it can use an existing structure and upgrade it to meet the total enclosure requirements which can substantially reduce the cost to comply with PR 1430.