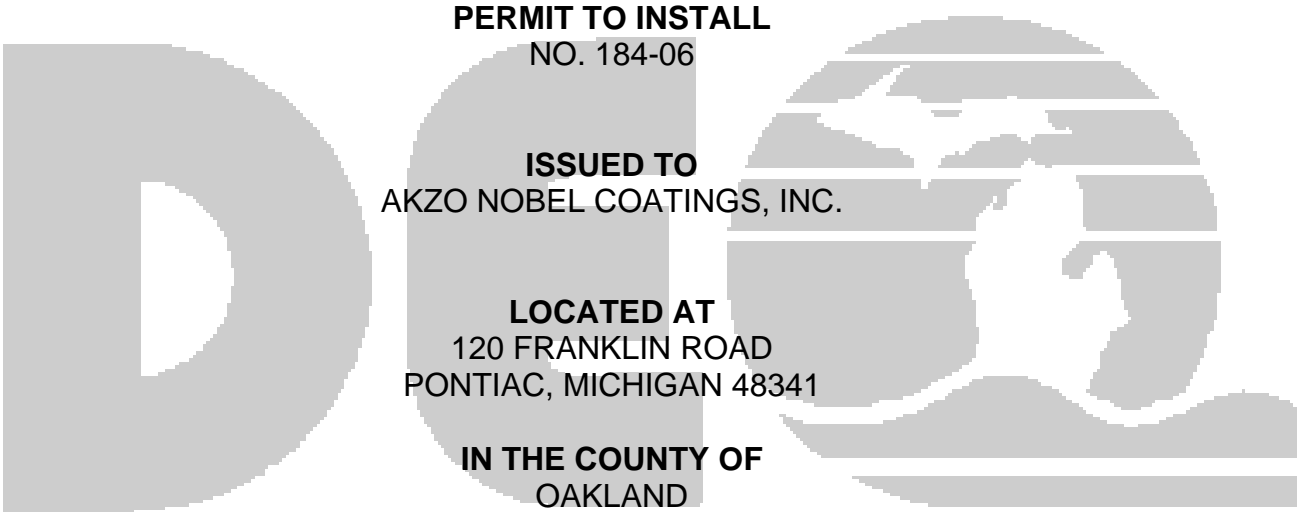


MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

AUGUST 18, 2006



PERMIT TO INSTALL

NO. 184-06

ISSUED TO

AKZO NOBEL COATINGS, INC.

LOCATED AT

120 FRANKLIN ROAD
PONTIAC, MICHIGAN 48341

IN THE COUNTY OF

OAKLAND

STATE REGISTRATION NUMBER

B4145

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

| | |
|--|------------|
| DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: 8/14/2006 | |
| DATE PERMIT TO INSTALL APPROVED: 8/18/2006 | SIGNATURE: |
| DATE PERMIT VOIDED: | SIGNATURE: |
| DATE PERMIT REVOKED: | SIGNATURE: |

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

| Common Acronyms | | Pollutant/Measurement Abbreviations | |
|------------------------|---|--|--|
| AQD | Air Quality Division | Btu | British Thermal Unit |
| ANSI | American National Standards Institute | °C | Degrees Celsius |
| BACT | Best Available Control Technology | CO | Carbon Monoxide |
| CAA | Clean Air Act | dscf | Dry standard cubic foot |
| CEM | Continuous Emission Monitoring | dscm | Dry standard cubic meter |
| CFR | Code of Federal Regulations | °F | Degrees Fahrenheit |
| COM | Continuous Opacity Monitoring | gr | Grains |
| EPA | Environmental Protection Agency | Hg | Mercury |
| EU | Emission Unit | hr | Hour |
| FG | Flexible Group | H ₂ S | Hydrogen Sulfide |
| GACS | Gallon of Applied Coating Solids | hp | Horsepower |
| GC | General Condition | lb | Pound |
| HAP | Hazardous Air Pollutant | m | Meter |
| HVLP | High Volume Low Pressure * | mg | Milligram |
| ID | Identification | mm | Millimeter |
| LAER | Lowest Achievable Emission Rate | MM | Million |
| MACT | Maximum Achievable Control Technology | MW | Megawatts |
| MAERS | Michigan Air Emissions Reporting System | NO _x | Oxides of Nitrogen |
| MAP | Malfunction Abatement Plan | PM | Particulate Matter |
| MDEQ | Michigan Department of Environmental Quality | PM-10 | Particulate Matter less than 10 microns diameter |
| MIOSHA | Michigan Occupational Safety & Health Administration | pph | Pound per hour |
| MSDS | Material Safety Data Sheet | ppm | Parts per million |
| NESHAP | National Emission Standard for Hazardous Air Pollutants | ppmv | Parts per million by volume |
| NSPS | New Source Performance Standards | ppmw | Parts per million by weight |
| NSR | New Source Review | psia | Pounds per square inch absolute |
| PS | Performance Specification | psig | Pounds per square inch gauge |
| PSD | Prevention of Significant Deterioration | scf | Standard cubic feet |
| PTE | Permanent Total Enclosure | sec | Seconds |
| PTI | Permit to Install | SO ₂ | Sulfur Dioxide |
| RACT | Reasonable Available Control Technology | THC | Total Hydrocarbons |
| ROP | Renewable Operating Permit | tpy | Tons per year |
| SC | Special Condition Number | µg | Microgram |
| SCR | Selective Catalytic Reduction | VOC | Volatile Organic Compounds |
| SRN | State Registration Number | yr | Year |
| TAC | Toxic Air Contaminant | | |
| VE | Visible Emissions | | |

* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, 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. **[R336.1201(1)]**
2. If the installation, construction, reconstruction, relocation, or modification 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 permittee 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, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **[R336.1201(4)]**
3. 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 R336.1210, 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. **[R336.1201(6)(b)]**
4. 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 Department's rules or the Clean Air Act. **[R336.1201(8), Section 5510 of Act 451, PA 1994]**
5. 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 R336.1219 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 R336.1219. The written request shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **[R336.1219]**
6. 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. **[R336.1901]**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. 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 Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **[R336.1912]**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.

9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.
11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R336.1301, the permittee 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 R336.1303. **[R336.1301]**
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this permit to install.
12. 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 R336.1370(2). **[R336.1370]**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R336.2001 and R336.2003, under any of the conditions listed in R336.2001. **[R336.2001]**

SPECIAL CONDITIONS

Emission Unit Identification

| Emission Unit ID | Emission Unit Description | Stack Identification |
|---|---|---|
| EULARGE BATCH | Includes equipment appropriate for batch sizes greater than 550 gallons including: dispersion tanks, mills, mill tanks, storage tanks and associated piping. Particulate emissions are controlled by three dust collectors (DC-1, (Unimaster and EZ filter), Prestage (ArrestAll) and WB-DC (Ultra-web filter followed by a HEPA filter)). VOC emissions are vented directly to the atmosphere through conservation vents, exhaust systems or dust collection systems. | SVDC-1, SV-DC-2, SVPRESTAGEDC, SVWB-DC, SVCH, SVSB-CV |
| EUSMALL BATCH | Includes equipment appropriate for batch sizes less than or equal to 550 gallons including: dispersion tanks, mills, mill tanks, storage tanks and associated piping. Particulate emissions are controlled by three dust collectors (DC-1, (Unimaster and EZ filter), Prestage (ArrestAll) and WB-DC (Ultra-web filter followed by a HEPA filter)). VOC emissions are vented directly to the atmosphere through conservation vents, exhaust systems or dust collection systems. | SVDC-1, SV-DC-2, SVPRESTAGEDC, SVWB-DC, SVCH, SVSB-CV |
| EUCBU | Color Blending Unit: Includes equipment appropriate for batch sizes less than or equal to 250 gallons including: dispersion tanks, storage tanks and associated piping. Particulate emissions are controlled by a dust collector (CBU-DC). VOC emissions are vented directly to the atmosphere through conservation vents, exhaust systems or dust collection systems. | SVCBU-DC, SVCBU-CH |
| EUPORTTANK | Cleaning of portable tanks. | NA |
| EUCOLDCLEANERS | Any new cold solvent cleaner placed into operation after 7/01/79 that is exempt from the requirements of R336.1201 pursuant to R336.1281(h) and R336.1285(r)(iv). | NA |
| EUPARTSWASHER | A parts washer that uses non-halogenated solvents. | NA |
| Changes to the equipment described in this table are subject to the requirements of R336.1201, except as allowed by R336.1278 to R336.1290. | | |

Flexible Group Identification

| Flexible Group ID | Emission Units Included in Flexible Group | Stack Identification |
|--------------------------|--|---|
| FGPAINT | EULARGE BATCH, EUSMALL BATCH, EUCBU | SVDC-1, SV-DC-2, SVPRESTAGEDC, SVWB-DC, SVCH, SVSB-CV |
| FGCLEANING | EUPORTTANK, EUCOLDCLEANERS | SVCH |
| FGFACILITY | All equipment at the facility including equipment covered by other permits, grand-fathered equipment and exempt equipment. | NA |

The following conditions apply to: EUPARTSWASHER

Material Limits

- 1.1 The permittee shall not use cleaning solvents containing more than five percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. [R 336.1707(1)]

Process/Operational Limits

- 1.2 Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. [R 336.1707(3)(b)]
- 1.3 The permittee shall perform routine maintenance on EUPARTSWASHER as recommended by the manufacturer. [R 336.1702(a)]

Equipment

- 1.4 The permittee shall equip EUPARTSWASHER with a device for draining cleaned parts. [R 336.1707(3)(b)]
- 1.5 The permittee shall equip EUPARTSWASHER with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. [R 336.1707(3)(a)]
- 1.6 The permittee shall equip EUPARTSWASHER with a cover that is mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. [R 336.1707(3)(a)]
- 1.7 If the Reid vapor pressure of any solvent used in EUPARTSWASHER is greater than 0.6 psia; or, if any solvent used is heated above 120 degrees Fahrenheit, then EUPARTSWASHER must comply with at least one of the following provisions:
- a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. [R 336.1707(2)(a)]
 - b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. [R 336.1707(2)(b)]
 - c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. [R 336.1707(2)(c)]

Monitoring

1.8 The permittee shall monitor the net solvent usage for EUPARTSWASHER per year based on a 12-month rolling period as determined at the end of each calendar month. The permittee shall determine the amount of solvent used on a "net usage" basis. "Net usage" is defined as the amount of solvent added to EUPARTSWASHER to bring the solvent levels up to starting levels less any amount of solvent removed as waste. **[R336.1702(a)]**

Recordkeeping/Reporting/Notification

1.9 The permittee shall maintain the following information on file for each cold cleaner: **[R 336.1707(2)]**

- a. The Reid vapor pressure of each solvent used.
- b. If applicable, the option chosen to comply with Rule 707(2).

1.10 The permittee shall maintain written operating procedures for EUPARTSWASHER. These written procedures shall be posted in an accessible, conspicuous location near EUPARTSWASHER.
[R336.1707(4)]

1.11 The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the net solvent usage, for EUPARTSWASHER, each month and 12-month rolling time period. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **[R336.1702(a)]**

1.12 The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of calculations of the VOC emissions for EUPARTSWASHER. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request.
[R336.1702(a)]

The following conditions apply to: FGCLEANING

Process/Operational Limits

- 2.1 The permittee shall conduct cleaning of paint manufacturing and paint shipping containers using methods and materials that minimize the emission of volatile organic compounds. These methods and materials shall include one of the following:
 - a. Hot alkali or detergent cleaning.
 - b. High pressure water cleaning.
 - c. Cleaning by use of an organic solvent if the equipment being cleaned is completely covered or enclosed, except for an opening that is no larger than necessary to allow for safe clearance considering the methods and materials being used. [R336.1702(a)]
- 2.2 The permittee shall store wash solvent only in closed containers. [R336.1702(a)]
- 2.3 Within 60 days of permit issuance, the permittee shall submit to the AQD District Supervisor, for review and approval, the work practice standards for portable tank cleaning. The permittee shall implement and comply with the approved work practice standards. If any amendments are made to the work practice standards the permittee shall submit the amended plan to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the work practice standards shall be considered approved. [R336.1702(a)]

Equipment

- 2.4 The permittee shall equip all stationary and portable mixing tanks and high speed dispersion mills with covers that completely cover all openings except for those which are no larger than necessary to allow safe clearance for the mixer shaft. The openings shall be covered at all times except when operator access is necessary. In addition, all solvent containers shall be closed when not in use. [R336.1205(3), R336.1702(a)]

Recordkeeping/Reporting/Notification

- 2.5 The permittee shall keep, in a satisfactory manner, monthly records of the number of portable tanks cleaned. All records shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1205(3), R336.1702(a)]
- 2.6 The permittee shall keep a record of the number of parts cleaners used at the facility. All records shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1205(3), R336.1702(a)]
- 2.7 The permittee shall keep a written record of the current emission factors used to calculate VOC and HAP emission rates. Prior to making a change in the paint manufacturing process which results in a meaningful increase in emissions, the permittee shall recalculate the emission factors to verify that those factors are still based on reasonable worst case emission rates. Revised emission factors shall be submitted to the AQD District Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1205(3), R336.1702(a)]
- 2.8 The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period calculations of VOC and HAP emission rates for EUCLEANING. All records shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1205(3), R336.1702(a)]

The following conditions apply to: FGPAINT

Emission Limits

| | Pollutant | Equipment | Limit | Time Period | Testing/ Monitoring Method | Applicable Requirement |
|-----|------------------|------------------|---|--------------------|---|---------------------------------------|
| 3.1 | PM | FGPAINT | 0.1 lbs per 1,000 lbs exhaust gas | Test Protocol | GC 13 | R336.1225, R336.1331, R336.1901 |

Material Usage Limits

| | Material | Limit | Time Period | Testing/ Monitoring Method | Applicable Requirement |
|--|-----------------|-------------------|----------------------|---|-----------------------------------|
| 3.2a | Small Batch | 2,200,000 gallons | 12-Month Rolling* | SC 3.8, 3.10, 3.11 | R336.1205(1)(a), R336.1702(a) |
| 3.2b | Large Batch | 5,086,764 gallons | 12-Month Rolling* | SC 3.8, 3.10, 3.11 | R336.1205(1)(a), R336.1702(a) |
| 3.2c | Waterborne | 1,256,000 gallons | 12-Month Rolling* | SC 3.8, 3.10, 3.11 | R336.1205(1)(a), R336.1702(a) |
| 3.2d | CBU | 300,000 gallons | 12-Month Rolling* | SC 3.8, 3.10, 3.11 | R336.1205(1)(a), R336.1702(a) |
| *12-Month rolling time period as determined at the end of each calendar month. | | | | | |

Process/Operational Limits

- 3.3 The permittee shall conduct cleaning of paint manufacturing and paint shipping containers using methods and materials that minimize the emission of volatile organic compounds. These methods and materials shall include one of the following:
- a. Hot alkali or detergent cleaning.
 - b. High pressure water cleaning.
 - c. Cleaning by use of an organic solvent if the equipment being cleaned is completely covered or enclosed, except for an opening that is no larger than necessary to allow for safe clearance considering the methods and materials being used. **[R336.1702(a)]**
- 3.4 The permittee shall store wash solvent only in closed containers. **[R336.1702(a)]**

Equipment

- 3.5 The permittee shall equip all stationary and portable mixing tanks and high speed dispersion mills with covers that completely cover all openings except for those which are no larger than necessary to allow safe clearance for the mixer shaft. The openings shall be covered at all times except when operator access is necessary. In addition, all solvent containers shall be closed when not in use. **[R336.1205(3), R336.1702(a)]**
- 3.6 The permittee shall not charge solids to any equipment unless the associated dust collectors are installed, maintained, and operated in a satisfactory manner. **[R336.1331]**
- 3.7 Within 365 days of permit issuance, the permittee shall replace all flexible plastic covers (shower caps) with tight fitting covers. Flexible plastic covers shall be allowed on empty tanks. **[R336.1702(a)]**

Monitoring

3.8 The permittee shall install, calibrate, maintain and operate, in a satisfactory manner, a device to monitor the pressure drop for the DC-1 and DC-2 dust collectors, WB dust collector, and prestage dust collector on a continuous basis. **[R336.1331]**

Recordkeeping / Reporting / Notification

3.9 The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the gallons of each paint type (SBP, SBNP, LBP, LBNP, WSBP, WLBP, and CBU) produced. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1205(1)(a), R336.1702(a)]**

3.10 The permittee shall keep, in a satisfactory manner, weekly records of the pressure drop, as required by SC 3.8, for the DC-1 and DC-2 dust collectors, WB dust collector, and prestage dust collector. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1331]**

3.11 The permittee shall keep a written record of the current emission factors used to calculate VOC and HAP emission rates. Prior to making a change in the paint manufacturing process which results in a meaningful increase in emissions, the permittee shall recalculate the emission factors to verify that those factors are still based on reasonable worst case emission rates. Revised emission factors shall be submitted to the AQD District Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1205(3), R336.1702(a)]**

3.12 The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period calculations of VOC and HAP emission rates for FGPAIN. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1205(3), R336.1702(a)]**

Stack/Vent Restrictions

| | Stack & Vent ID | Maximum Diameter (inches) | Minimum Height Above Ground Level (feet) | Applicable Requirement |
|--|----------------------------|----------------------------------|---|-------------------------------|
| 3.13a | SVDC-1* | 10" x 15" | 10.5 | R336.1225, R336.1901 |
| 3.13b | SVPRESTAGEDC | 24" x 32" | 10.5 | R336.1225, R336.1901 |
| 3.13c | SVCH | 34" x 60" | 36 | R336.1225 |
| 3.13d | SVWBDC* | 10 | 10.5 | R336.1225 |
| 3.13e | SVSBCV* | 6 | 45 | R336.1225 |
| 3.13f | SVCBUDC* | 10 | 31 | R336.1225 |
| 3.13g | SVCBUCH | 30 | 45 | R336.1225 |
| 3.13h | SVDC-2* | 6" x 20" | 6 | R336.1225 |
| The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air. *These stacks are not required to discharge vertically upwards. | | | | |

The following conditions apply to: FGFACILITY

Emission Limits

| | Pollutant | Equipment | Limit | Time Period | Testing/ Monitoring Method | Applicable Requirement |
|------|------------------|------------------|--------------|--------------------|---|-----------------------------------|
| 4.1a | VOC | FGFACILITY | 60 tpy | 12-month rolling* | SC 3.2 | R336.1205(3) |
| 4.1b | Individual HAP | FGFACILITY | <9 tpy | 12-month rolling* | SC 3.2 | R336.1205(3) |
| 4.1c | Total HAPs | FGFACILITY | <22.5 tpy | 12-month rolling* | SC 3.2 | R336.1205(3) |

*12-month rolling time period as determined at the end of each calendar month.

Recordkeeping / Reporting / Notification

- 4.2 The permittee shall keep a written record of the current emission factors used to calculate VOC and HAP emission rates. Prior to making a change in the paint manufacturing process which results in a meaningful increase in emissions, the permittee shall recalculate the emission factors to verify that those factors are still based on reasonable worst case emission rates. Revised emission factors shall be submitted to the AQD District Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1205(3), R336.1702(a)]**
- 4.3 The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period calculations of VOC and HAP emission rates for FGFACILITY. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1205(3), R336.1702(a)]**