

GENERAL GUIDELINES

Inspections shall be made to determine compliance of facilities that fall under the requirements of Rule 4605.

Inspection Assignments

Area inspectors shall be responsible for inspecting 4605 sources in their assigned areas for determination of compliance.

Complaint Assignments

Complaints against aerospace facilities will be assigned to the area inspector for investigation. The area inspector will investigate all aspects dealing with the complaint. Common complaints are paint fallout or over-spray and paint or solvent odors.

Pre-Inspection Procedures

Preparation for a regularly scheduled compliance inspection includes, but is not limited to, the following recommendations:

Review of the facility files which show permitted sources, permit conditions, and abatement equipment.

A review of the facility's past and present compliance status. If there have been problem areas in the past, pay closer attention to those areas during this inspection. Note any variance activity and pending enforcement actions.

A review of the facility's complaint history. Have there been any complaints since the last compliance inspection that may indicate problem areas?

Gather any necessary forms and equipment needed to conduct the inspection, including proper safety equipment, a copy of Rule 4605, and appropriate inspection forms.

PERMIT REQUIREMENTS

General

Aerospace facilities are permitted on a source specific basis. Examples of sources requiring an Authority to Construct and Permit to Operate are:

Paint spray booths
Spray areas
Solvent cleaners
Coating application areas
Adhesive application areas
Abrasive blasting equipment

Note: Spray gun cleaners are included in a spray booth or spray area Permit to Operate. They do not need a separate permit.

Exemptions

Section 5.0 requirements shall not apply to aerospace facilities using not more than four (4) gallons of products containing VOC per day. Additional facility exemptions are listed in Rule 4605 4.0 and 2020. Because of rapidly changing coating, solvent, and adhesive requirements in the aerospace business, inspectors should carefully scrutinize all claimed exemptions. Exemption from ATC and PTO requirements does not exempt a facility from recordkeeping requirements.

Violations

A violation notice may be issued for all non-permitted sources, except as provided in (B) above.

In order to provide compliance assistance to facilities in violation of permit requirements, the inspector is to give the aerospace facility owner/operator a permit application packet and help them fill out the forms, as needed.

The completed application packets will include:

Application for an ATC and PTO
Plant Data
Small Business Certification, if applicable
Surface Coating/Solvent Source and Coating Usage Worksheet
Coater Data Worksheet (one for each booth or application area)

Inspectors will accept permit applications when submitted by the aerospace facility and deliver them, through their supervisor, to the Permit Services Division for processing.

Permit Conditions

Aerospace facilities will have permit conditions listed on their Permit to Operate. New or modified sources will have conditions listed on the ATC.

If the permit conditions have requirements or standards similar to those in Rule 4605, the inspector will enforce the more stringent standard or requirement. If the permit condition references or essentially quotes the regulation, violation notices will be issued for the regulation only, not the condition.

Typical permit conditions are recordkeeping requirements, coating/solvent/ adhesive usage limitations, and the use of exhaust fans and filters in the spray booth when operating.

In order to change a permit condition, an aerospace facility must submit a new permit application to the Permit Services Division along with a request for the desired change.

INSPECTION PROCEDURES

General

Upon arrival at the facility, contact the person in charge, identify yourself, and give them your business card. Advise them of the purpose of the inspection and explain that they will be advised of the results upon completion of the inspection. Facilities requesting a copy of the inspection report will be advised that a copy will be mailed after the forms are completed by the area inspector.

The suggested inspection sequence for 4605 facilities is as follows:

Determine if facility has and/or is required to have a Permit to Operate. For permitted facilities, determine if the PTO is available and if applicable, is the owner/operator aware of permit conditions? If the PTO is not available, advise the owner to contact the District for a duplicate.

Review exemptions.

Inspect all sources, including associated application equipment, spray equipment, gun cleaners, and solvent and rag storage for compliance with operating requirements.

If a Section 5.0 discrepancy is suspected, take random samples of coatings to verify compliance with VOC limits.

Review coating records and manufacturer's data (MSDS) for compliance.

Conduct post inspection debriefing with the owner/operator.

Equipment Identification

Plant inspection materials generally list sources with enough specificity to determine those sources to which the rule applies. Permit copies should be posted according to Rule 2010 5.0.

Application Equipment Requirements

All coating must be applied using spray equipment that is either electrostatic application, electrodeposition, High Volume Low Pressure (HVLP), flow coating, roll coating, dip coating, or brush coating. All equipment must be operated in accordance with manufacturer's recommendations.

If any other type of application system than referenced above is used, or if improper operation is observed, a violation notice will be issued.

The use of noncomplying application equipment should be verified through records and observations or from information given by the facility representative. Further verification of application equipment can be obtained through the facility's supplier.

Electrostatic

Electrostatic application uses low amperage direct current transmitted through an electrical cable to the spray gun equipped with an electrode that charges the atomized paint.

Electrodeposition

A dip coating application method where the paint solids are given an electrical charge which is then attracted to a substrate.

HVLP-High Volume, Low Pressure

The HVLP gun has an operating pressure between 0.1 and 10 psi at the nozzle. It requires a 3 to 5 horsepower air compressor to function properly.

HVLP guns may be marked clearly with the HVLP label. To determine if the spray gun is HVLP, check for a connection tube from the spray gun to the paint cup. All HVLP guns must have this connecting tube to adjust gun pressure.

An air test nozzle assembly must be used to measure the nozzle spray pressure to determine if the spray gun is a HVLP spray gun. If there are questions on whether the gun is HVLP, call the manufacturer or supplier to verify the model.

Flow Coating

A coating application system where paint flows over the part and the excess coating drains back into the collection system.

Roll Coating

The application of coatings from a paint through to a flat surface by a mechanical series of rollers.

Dip Coating

The process in which a substrate is immersed in a solution (or dispersion) containing the coating material, and then withdrawn.

Brush Coating

Manual application of coatings using brushes or rollers.

The use of touch-up or "detailing" guns for incidental or touch-up work shall not be considered a violation of this section.

Surface Preparation, Cleanup Solvents, and Storage

The usage of solvents containing VOCs for surface preparation and cleanup must comply with the following:

Only solvents that meet 4605 5.0 (unless exempted under 4605 4.0) shall be used.

Cloth or paper used with solvents must be stored and/or disposed of in closed containers. Containers shall be nonabsorbent.

Fresh or spent solvent, coatings, adhesives, catalysts, or thinners must be stored in closed containers. This includes solvent containers with stirring and mixing sticks.

Cleanup of spray equipment requires the use of enclosed cleaners manufactured for the purpose of gun cleaning. They must be closed when containing solvent, except to load or unload guns.

Coating Standards

Only coatings, coating strippers, and adhesives that meet 4605 5.0 (unless exempted under 4605 4.0) shall be used. For VOC conversion purposes one pound/gallon = 119.83 grams/liter. Inspectors should note that on 2/17/94 many VOC limits were increased due to the lack of compliant coatings that meet aerospace specifications.

Compliance with VOC limits will be determined through review of facility records. Coating samples should be taken for any suspected violation to verify compliance. Samples will be taken in accordance with the Test Methods (Section 6.2) of Rule 4605.

Other Standards

Prohibition of Solicitation

After the effective date of this rule, no person shall solicit, specify or require any other person to use in the District any coating, solvent, spray equipment, or control equipment that does not meet the limits or requirements of Rule 4605.

VOC determination

Any person subject to this rule shall have coating, coating stripper, adhesive, or solvent manufacturer's specifications, either listed on the container or on the Material Safety Data Sheets (MSDS), available for the inspectors review.

Add-on equipment control

As an alternate to meeting the requirements of Rule 4605 5.1 or 5.2, a person may install pollution control equipment that meets Section 5.6 requirements.

COATING RECORDS

Records Required

Coating record requirements apply to any person subject to Section 4.0 or 5.0 of Rule 4605. All sources shall comply with the requirements of Section 6.0 of Rule 4605.

Records Evaluation

The following should be included in an evaluation of records in order to determine compliance with the recordkeeping section.

Review the manufacturer's information sheets.

Are they current and does the facility use the correct VOC information in their records?

Some coating manufacturers supply computer programs with VOC information included.

Review facility-wide records.

Does the coating, coating stripper, specialty coating, solvent, and adhesive application records meet the requirements of Section 6.0?

If all of the information required above is maintained on a source specific bases, as in some computer records, facility-wide records are not necessary.

Review daily coating usage records for each permitted source during the inspection.

Does the VOC content as applied comply with the applicable standard? Take samples of any suspected non-complying coatings.

Do they show compliance with permit conditions?

Review daily usage records for the most appropriate time period as follows:

Sources subject to the rule for more than one year prior to inspection date -- evaluate prior 12 months.

Sources subject to the rule for less one year prior to inspection -- use date of ATC or PTO issuance or equipment start-up date or rule effective date as appropriate.

Last inspection within or greater than 12 months-use date of previous inspection forward.

Records Not Immediately Available

In certain cases records are in existence at the time of inspection, but can not be produced because knowledgeable personnel are not present, because the records are temporarily elsewhere, because of computer failure, or for other good reasons. If unavailable, the facility will provide them to the District within three working days and the inspector will advise the owner/operator of the need to have records readily available during future inspections. If the records are not produced within the specified time limit, a violation notice will be issued.

Incomplete Records

These are records where the date is omitted, failure to include totals, or are otherwise incomplete but the owner/operator is making a reasonable effort to comply with the regulation or permit condition.

Example: The inspector finds a facility is keeping current records. Out of 12 months of records two days of usage have not been entered and the VOC content of a few of the coatings are missing. However, the facility contact has a copy of the MSDS sheets for each coating containing the current VOC information. Also the inspector notices the coating usage remains consistent. From this information, the inspector can evaluate compliance and determine that no excess emissions have occurred.

Where a reasonable effort has been made to keep records and compliance with the coating standards can be demonstrated on a continuing basis, a violation notice should not be issued.

Records Not Kept

A violation notice should be issued for failure to keep records for each day of operation as determined in accordance with Section 6.2 of District Rule 4605. In cases where no records are kept, the inspector will take alternate steps to determine compliance with the coating standards. These steps may include, but are not limited to the inspection of purchase records, production records, supply issue documents, etc. If compliance cannot be determined, samples of all coatings should be taken.

Permit Conditions

Where the recordkeeping requirements are essentially the same in the regulation as in the permit condition, the regulation will be used for evaluating records.

Where the recordkeeping requirements are different in the regulation from the permit condition, the most stringent requirement will be used for evaluation. The lesser requirement will not be used for evaluation or cited for a violation.

Most permit conditions at 4605 facilities limit the amount of VOC emitted on a daily basis.

Records should be evaluated for the 12 month period prior to the date of inspection or from the date the condition became effective, whichever is longer. Net solvent usage or evaporation should be determined from purchase records minus any disposal records. Disposal can include removal as waste or to a reclaimer.

If usage limits are exceeded a violation notice should be issued and the owner/operator may be advised to submit a new permit application and a request to modify the condition. Compliance date for the violation will be the date when the usage falls below the condition limit or when the new permit application is accepted by Permit Services. If the condition is not subsequently modified by Permit Services, and usage is exceeded, a new Notice of Violation will be issued.

POST INSPECTION PROCEDURES

The following elements should be covered with the owner/operator in a post inspection debriefing:

Discuss overall condition of plant and equipment and review the facility's preventative maintenance program.

Review rules applicable to source and advise source of any rule changes or upcoming VOC limitations.

Review all PTOs and ATCs, including the need for proper posting and to comply with appropriate conditions. Discuss any permit conditions that appear to be incorrect.

Review results of the equipment inspection and the storage of coatings, adhesives, solvents and rags.

If coating samples were taken, advise the source of possible enforcement actions if any coating is found to be noncomplying.

Review records evaluation, advise source of any deficiencies, and discuss improvement areas.

Issue appropriate violation notices and review compliance options.

Advise source of District procedures applicable to any new plant equipment or modifications to permitted equipment.

Provide compliance assistance information as necessary, including pamphlets, appropriate rule copies, and ARB brochures. Make appropriate recommendations to improve compliance and to facilitate future inspections. The goal of a successful compliance inspection is to ensure that the owner/operator has sufficient information and understanding of the regulations to maintain continued compliance.