

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

GENERAL ORDER OF APPROVAL FOR AUTOMOBILE BODY REPAIR AND REFINISHING SHOPS

General Order No. 08-AQG-001,
Issued April 25, 2008

Table 1: Applicability Criteria for this General Order of Approval

| Criterion | Limitation |
|------------------------|--|
| Location in Washington | Any jurisdiction within which New Source Review requirements are regulated by the Department of Ecology's Air Quality Program. At the time of issuance of this general order, this includes: Adams, Asotin, Chelan, Columbia, Douglas, Ferry, Franklin, Garfield, Grant, Kittitas, Klickitat, Lincoln, Okanogan, Pend Oreille, San Juan, Stevens, Walla Walla, and Whitman counties. |
| Facility description | Repair and refinish the passenger and cargo enclosure (i.e., the "body") sections of automobiles, trucks, and other mobile equipment. The spray booth is not part of a new major stationary source or major modification to a major stationary source (i.e., the spray booth is not subject to review under the Prevention of Significant Deterioration Program). The addition of the spray booth to an existing source does not make the source subject to the Air Operating Permit (AOP) program or require a modification in an existing AOP permit. |
| Size | Shall not use more than 950 gallons in any consecutive twelve months of refinishing materials of all types. This includes reducers and cleaning solvents. |
| Design | Spray booth with at least an exhaust fan, filter (arrestor), and unrestricted exhaust stack. Exhaust fan, filter (arrestor), and exhaust stack sizes shall comply with the relationship described in this order. If the spray booth or booths are combustion-heated independently from general shop heating: <ul style="list-style-type: none"> (1) Only natural gas, propane, liquefied petroleum gas (LPG), or on-road quality diesel fuel may be used. (2) The total heating capacity of the related combustion device(s) must be smaller than the following: <ul style="list-style-type: none"> (a) four million Btu/hr for natural gas, propane, and LPG (b) 1,000,000 Btu/hr for on-road quality diesel |
| Refinishing materials | Low-VOC: Compliant with 40 CFR Part 59, Subpart B. None may contain cadmium. |
| Equipment | Spray gun transfer efficiency rating not less than typical of high volume, low pressure (HVLP) equipment. Spray gun cleanup in closed system. |

Compliance with National Emission Standards for Hazardous Air Pollutants

In addition to the Approval Conditions in this general order, automobile body repair and refinishing shops must comply with the provisions of the National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources (40 CFR Part 63 Subpart HHHHHH). Please contact USEPA Region 10 (800) 424-4372 or (206) 553-1200 for more information.

Process to apply for coverage

Submit:

1. The appropriate application forms: Contact the Ecology office that covers the location of your proposed auto body refinishing shop installation for copies (see Table 2, below). The application forms must be completely filled out before Ecology can grant the Coverage Order.

Table 2: Ecology Permit Issuing Offices

| | |
|---|---|
| Air Quality Program Central Regional Office 15 West Yakima Ave - Suite 200 Yakima, WA 98902-3452 Tel. No (509) 575-2490 | Industrial Section PO Box 47600 Olympia, WA 98504-7600 Tel. No: (360) 407-6945 |
| Air Quality Program Eastern Regional Office N. 4601 Monroe Spokane, WA 99205-1295 Tel. No (509) 329-3400 | Nuclear Waste Program Hanford Unit 3100 Port of Benton Blvd. Richland, WA 99354 Tel. No. (509) 372-7950 |
| On the internet at : http://www.ecy.wa.gov/programs/air/airhome.html | |

2. The application/coverage fee of \$500. This fee must be paid before the Coverage Order can be issued.
3. Documentation of SEPA compliance.
 - If SEPA for this project has been done by another agency, submit copies of the Determination of Nonsignificance, Mitigated Determination of Nonsignificance, Environmental Impact Statement, and/or the corresponding SEPA checklist issued for the project.
 - If SEPA has not been done by another agency, submit a completed SEPA checklist. The checklist is available from the above contacts or on the internet at http://www.ecy.wa.gov/biblio/forms-sepa_forms.html.

Granting of Coverage

For those units that qualify for coverage, the applicant will receive a Coverage Order within 30 days after the complete application has been received. Granting of the Coverage Order requires that the applicant comply with the terms of this General Order.

For those units that do not qualify for coverage, the applicant will receive written notification from Ecology within 30 days after the application has been received. The letter will state why the unit does not qualify for coverage under this General Order of Approval.

Approval Conditions

1. General and siting criteria

| | Parameter | Requirement or limitation |
|-----|-------------------------------------|---|
| (a) | Size | Shall not use more than 950 gallons in any 12 consecutive months of refinishing materials of all types. This includes reducers and cleaning solvents. |
| (b) | Exhaust stack | Vertical exhaust. Minimize bends, obstructions, and building interference with exhaust dispersion. No cap on exhaust that restricts flow. A minimum of one meter (3.5 feet) above the roofline. |
| (c) | Surface preparation | All sanding and grinding shall be done in an enclosed building that allows only incidental amounts of sanding/grinding particulate matter to escape to the outside air. A building is "enclosed" if, and only if, the doors and windows are closed. "Incidental Amounts" means the unfiltered escape of air from the building when doors are opened for people, equipment, or vehicles to exit or enter the building. Manual application of all pretreatment washes shall be done in the spray booth with the exhaust blower operating. As-applied pretreatment washes, specified in Approval Condition 2 below, must comply with 40 CFR Part 59, Subpart B. |
| (d) | Spray painting | All spray painting shall be done in an enclosed spray booth with the exhaust blower operating. The spray booth shall be supplied with an exhaust blower such that velocity from the stack shall not be less than 1,987 feet per minute. The design face velocity against the overspray filter (arrestor) shall not be less than 100 feet per minute. The spray booth must be at a negative pressure compared to outside air unless the booth is a completely sealed design. The spray booth shall be equipped with a filter (arrestor) system capable of not less than 98% capture of overspray nonvolatile material. Replace filters (arrestors) according to manufacturer's instructions. As-applied refinishing material VOC content, specified in Approval Condition 2 below, must comply with 40 CFR Part 59, Subpart B. Spray guns must have a transfer efficiency that is at least equal to high volume, low pressure designs (HVLP). |
| (e) | Equipment cleaning and housekeeping | Conduct spray gun cleaning in an enclosed apparatus. Keep all materials containing volatile organic compounds (VOCs) in closed containers when not being used. Store all waste VOC-containing materials including waste fuel, antifreeze, engine and transmission oil, brake fluid, spray booth filters (arrestors), cleanup rags, sponges, etc. in closed, airtight containers until final disposal. Minimize and immediately clean up spills. |

2. VOC-compliant refinishing materials: 40 CFR Part 59, Subpart B

| | Coating Category | Definition | VOC Content as-applied lbs/gal |
|-----|------------------------------|---|---------------------------------------|
| (a) | Pretreatment Wash Primer | Contains a minimum of 0.5 percent acid, by weight, that is applied directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent coatings. | 6.5 |
| (b) | Primer | Applied prior to the application of a topcoat for the purpose of corrosion resistance and/or adhesion. | 4.8 |
| (c) | Primer Surfacer | Applied prior to the application of a topcoat for the purpose of filling surface imperfections in the substrate, corrosion resistance, and/or adhesion of the topcoat. | 4.8 |
| (d) | Primer Sealer | Applied prior to the application of a topcoat for the purpose of corrosion resistance, adhesion of the topcoat, and/or color uniformity and to promote the ability of an undercoat to resist penetration by the topcoat. | 4.6 |
| (e) | Single stage Topcoat | Applied over a primer or an existing finish for the purpose of protection or beautification. | 5.0 |
| (f) | 2-stage Topcoat | A pigmented basecoat and a transparent clearcoat. | 5.0 |
| (g) | Topcoats of 3 or more stages | A pigmented basecoat, a midcoat, and a transparent clearcoat. | 5.2 |
| (h) | Multi-colored Topcoat | Exhibits more than one color, is packaged in a single container, and camouflages surface defects on areas of heavy use, such as cargo beds and other surfaces of trucks and other utility vehicles. | 5.7 |
| (i) | Specialty Coatings | Adhesion promoters, low-gloss coatings, bright metal trim repair coatings, jambing (cut-in) clearcoats, elastomeric coatings, impact resistant coatings, underbody coatings, uniform finish blenders, and weld-through primers. | 7.0 |

3. Emission limitations monitoring, recordkeeping and reporting requirements

| | Pollutant or parameter | Limitation(s) | Monitoring | Recordkeeping | Reporting |
|-----|--------------------------|--|--|---|--|
| (a) | Refinishing material use | 950 gallons in any twelve consecutive months, including reducers and cleaning solvents. | None | Record purchase and disposal quantities. | Provide documentation to Ecology within 30 calendar days of request unless otherwise specified by Ecology. |
| | | 30 gallons (332 pounds) of methylene chloride (alternate name: dichloromethane) in any twelve consecutive months. | Evaluate each stripping application to assure that the paint <i>must</i> be stripped and that nothing but methylene chloride will reasonably do the job. All reasonable efforts must be made to minimize methylene chloride evaporation. | Record the quantity of methylene chloride used, and add it up annually. Keep those records on-site for at least five years. | None |
| (b) | Pollutant emissions | Refinishing materials compliant with 40 CFR Part 59, Subpart B (see Approval Condition 2, above). None may contain cadmium. | Examine vendor literature, such as Material Safety Data sheets, for all refinishing materials. | Vendor documentation. | Provide documentation to Ecology within 30 calendar days of request unless otherwise specified by Ecology. |
| | | 98% effective spray booth filters (arrestors) verified by the vendor's publication | Follow manufacturer's instructions. | Record each time filters (arrestors) are changed. | Provide documentation to Ecology within 30 calendar days of request unless otherwise specified by Ecology. |

| | Pollutant or parameter | Limitation(s) | Monitoring | Recordkeeping | Reporting |
|--|------------------------|--|---|--|--|
| (c) | Visible emissions | 5% opacity as measured by EPA Method 9, 40 CFR Part 60, Appendix A (July 1, 2000). | <p>After each time the paint spray booth exhaust filters (arrestors) are changed, the operator shall observe the stack for visible emissions during the next period of daylight operation of the paint spray booth. A visible emission is any visible cloud or mist coming from the stack.</p> <p>If anything can be seen exiting the spray booth exhaust stack at <u>any time</u>, make corrections per Approval Condition 8. (b).</p> | <p>Record the time, date, and duration of the visible emissions observation, who conducted the observation, and (if visible emissions were observed) the corrective actions taken.</p> <p>Record shall be entered in either a bound log book (i.e., NOT a loose-leaf binder) or in readily accessible computer memory.</p> | <p>If corrective action fails to eliminate visible emissions within 24-hours, report in writing to permit issuing office (Table 2). Provide records to Ecology within 30 calendar days of request.</p> |
| <p>Visual stack exhaust observation procedure: Observe the spray booth stack exhaust during daylight hours while the spray booth is in operation. Observe the exhaust from the stack from a location with a clear view of the stack and where the sun is not directly in the observer's eyes. The observer shall be at least 15 feet but not more than 0.25 mile from the stack.</p> | | | | | |

Other Conditions of Approval

4. The spray booth, exhaust fan, filter (arrestor) and stack installed shall be consistent with the applicability criteria in Table 1 of this General Order of Approval.
5. The shop shall be installed where and as described in the permit application.
6. Spray booths and curing room may only be heated electrically or by heaters using natural gas, propane, liquefied petroleum gas (LPG), or on-road quality diesel fuel. The total heating capacity of the related combustion device(s) must be smaller than the following:
 - (a) Four million Btu/hr for natural gas, propane, and LPG,
 - (b) 1,000,000 Btu/hr for on-road quality diesel.

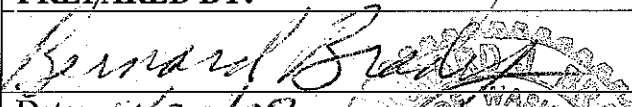
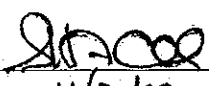
7. The permittee shall submit to Ecology the dates the installation of the shop is started and completed¹.
 - a. This Order shall become invalid if installation of the shop is not begun within 18 months after receipt of final approval, or if construction is not complete in a period of time deemed reasonable by Ecology.
 - b. Ecology may extend these deadlines upon a satisfactory showing that an extension is justified. The extension request must be received by Ecology prior to expiration of the Order.
8. Operation and Maintenance.
 - a. The permittee is to follow all recommended operation and equipment maintenance provisions supplied by the equipment manufacturers.
 - b. If the inspection for visible emissions indicates that anything can be seen exiting the spray booth exhaust stack, the permittee is to take immediate steps to correct any related problem (most likely the spray booth filter).
9. Legible copies of this General Order of Approval, the Coverage Order, and the Operations and Maintenance Manual shall be displayed onsite and available to employees in direct operation of the facility.
10. Periodic emissions inventory information and other information may be requested by Ecology. Information requested by Ecology shall be submitted within 30 days of receiving the request unless otherwise specified. Ecology will supply the necessary forms to use for periodic emission inventory.
11. Annual/periodic Registration or Air Operating Permit fees. The applicant will pay the required registration fees within the deadline date specified on the invoice from Ecology.
12. Access to the source for the purpose of determining compliance with the terms of this General Order of Approval by Ecology staff shall be permitted during normal business hours. Failure to allow such access is grounds for an enforcement action under the Washington State Clean Air Act.
13. The applicant is required to comply with applicable rules and regulations pertaining to air quality, and conditions of operation imposed upon issuance of this order. Any violation of applicable state and/or federal air quality rules and regulations or of the terms of this approval shall be subject to the sanctions provided in Chapter 70.94 RCW. Authorization under this Order may be modified, suspended, or revoked in whole or part for cause including, but not limited to, the following:
 - a. Violation of any terms or conditions of this authorization;
 - b. Obtaining this authorization by misrepresentation or failure to disclose fully all relevant facts.
14. The provisions of this General Order of Approval are severable and, if any provision of this authorization, or application of any provisions of this authorization to any circumstance, is held invalid, the application of such provision to their circumstances, and the remainder of this authorization, shall not be affected thereby.

¹ Electronic mail submittals of the notifications to the approving office are encouraged to reduce paperwork.

Legal Basis to Issue This General Order of Approval

The Department of Ecology Air Quality Program is issuing this General Order of Approval as allowed under Washington Administrative Code (WAC) 173-400-560. Receipt of a Coverage Order for installation of a specific unit under this approval satisfies the requirements of WAC 173-400-110.

Approvals

| PREPARED BY: | APPROVED BY: |
|---|--|
|  |  |
| Date: 4/24/08 | Date 4/25/08 |
| Bernard Brady, PE | Stuart A. Clark, Program Manager |
| Air Quality Program | Air Quality Program |
| Department of Ecology | Department of Ecology |

