

# ***AUTOMOTIVE REFINISHING EMISSION REGULATION BYLAW CONSOLIDATED***

**THIS IS A CONSOLIDATION, FOR REFERENCE PURPOSES, OF:**

- “Automotive Refinishing Emission Regulation Bylaw No. 1086, 2008”. This bylaw may be cited as “Greater Vancouver Regional District Automotive Refinishing Emission Regulation”. *(Adopted July 25, 2008)*
- “Metro Vancouver Regional District Automotive Refinishing Emission Regulation Amendment Bylaw No. 1296, 2019”. *(Adopted November 29, 2019)*

As of November 29, 2019

COPIES OF THE ORIGINAL BYLAWS MAY BE INSPECTED AT  
BOARD AND INFORMATION SERVICES, METRO VANCOUVER.

**Greater Vancouver Regional District**  
**Automotive Refinishing Emission Regulation Bylaw No. 1086, 2008**

WHEREAS:

- A. The Greater Vancouver Regional District has enacted the Greater Vancouver Regional District Air Quality Management Bylaw No. 1082, 2008; and
- B. That Bylaw contemplates that the Board of the Greater Vancouver Regional District may establish emission regulations.

NOW THEREFORE the Board of Directors of the Greater Vancouver Regional District in open meeting duly assembled enacts as follows:

**General**

- 1 This Bylaw may be cited for all purposes as the “Greater Vancouver Regional District Automotive Refinishing Emission Regulation” (in this Bylaw, “this Emission Regulation”).
- 2 (1) This Emission Regulation is an emission regulation for the purposes of section 26 of the Greater Vancouver Regional District Air Quality Management Bylaw No. 1082, 2008 (“the Bylaw”), and is deemed to be an integral part of the Bylaw.  
  
(2) Terms defined in the Bylaw, or incorporated by reference into the Bylaw, have the same meaning in this Emission Regulation.

*Amended by Bylaw 1296, 2019*

- 3 Any person who complies with the Bylaw and this Emission Regulation is exempt from section 5 of the Bylaw and from section 6 (2) and (3) of the Environmental Management Act provided that the person also complies with any further restrictions or conditions imposed under the Environmental Management Act.

*Amended by Bylaw 1296, 2019*

**Definitions**

- 4 In this Emission Regulation:

“**annual administrative fee**” means the annual fee payable to maintain the registration for an automotive refinishing facility;

“**automotive detailing**” means cleaning and restoring the exterior of a motor vehicle or mobile equipment, limited to washing, spot cleaning, touch-up coating, glass repair, and application of waxes, shines and polishes;

“**automotive refinishing**” means in the course of conducting an industry, trade or business of whatsoever kind or nature, any activity relating to the servicing, maintenance, repair, restoration or modification of a motor vehicle or mobile equipment, or their parts, involving surface repair, preparation and application of a coating, including, but not limited to:

- application of surface cleaners, degreasers or solvents;
- bodywork including application of body filler, putty and glaze;
- paint removal, including chemical stripping;

- mechanical surface preparation including sanding, grinding, and abrasive blasting;
- coating preparation including paint mixing;
- spray coating, or other coating application;
- cleanup activities, including spray gun washing.

Automotive refinishing does not include automotive detailing;

**“automotive refinishing products”** means coatings and surface cleaners used for automotive refinishing;

**“automotive refinishing facility”** means a building, structure, installation, property or thing, whether fixed at a single location or movable, at which or in which automotive refinishing is being carried out or is capable of being carried out, and specifically includes a mobile refinishing operation;

**“coating”** means a product that forms a film when applied to a surface for protective or any other automotive refinishing purpose but excludes products used in carrying out metal plating;

**“enclosed spray gun wash system”** means an electrically or pneumatically operated washing system designed to clean, rinse and drain spray application equipment. An enclosed spray gun wash system is a fully enclosed chamber that houses the spray application equipment being washed and that remains closed during the washing process, except when inserting or removing the equipment being washed. Cleaning is accomplished by forcing solvent through the spray application equipment;

**“environmental training program”** means a training and certification program, approved by the district director, including, but not limited to, instruction to ensure awareness of impacts to the environment caused by discharges of air contaminants, and practices and techniques for the reduction of air contaminant emissions from automotive refinishing;

**“excluded compounds”** means the compounds that are excluded under item 65 of Schedule 1 to the Canadian Environmental Protection Act, 1999 as well as acetic acid, 1,1-dimethylethyl ester (C6H12O2);

**“existing facility”** means any automotive refinishing facility which existed and was operational on 29 June 2001;

**“fugitive emissions”** means any gaseous, liquid or solid particulate matter that becomes airborne, the release of which could not reasonably be directed or controlled to pass through a stack, chimney or vent;

**“good air contaminant emission control practice”** means, but is not necessarily limited to:

- a) performing routine inspections, maintaining and calibrating all equipment in accordance with the manufacturer’s specifications for such equipment;
- b) operating all equipment in accordance with the manufacturer’s design specifications for such equipment;
- c) maintaining an adequate supply of replacement and spare parts for all works; and
- d) maintaining equipment inspection and repair records of automotive refinishing activities;

**“good engineering practice (GEP) stack height”** means the height in accordance with methods set out in the applicable handbooks of the American Society of Heating,

Refrigerating and Air Conditioning Engineers. GEP design must minimize or eliminate the effects of atmospheric downwash, wakes or eddy effects created by the automotive refinishing facility;

**"government body"** includes a federal, provincial, and local government body, including an agency or ministry of the Crown in right of Canada or British Columbia, and any other body or entity prescribed by the district director;

**"high-volume low-pressure spray gun"** means a coating application system which is operated at an air pressure of between 0.7 and 68.9 kilopascals (0.1 and 10 pounds per square inch gauge), measured at the centre of the air cap and at the centre of the air cap horns;

**"land owner"** means a person who is in possession, has the right to control, or occupies or controls the use of land on which automotive refinishing is conducted;

**"low emission spray gun cleaning system"** means a spray application equipment washing system, approved by the district director, used to clean spray application equipment that is not enclosed during the cleaning process. A low emission spray gun cleaning system minimizes evaporation, promotes the collection and recycling of solvent, and leaves no standing solvent remaining open to the atmosphere following equipment cleaning;

**"mobile equipment"** means any equipment, other than a motor vehicle, that is capable of being pulled on a highway;

**"mobile refinishing operation"** means an automotive refinishing facility that is movable from location to location;

**"modified facility"** means an existing facility at which a new spray booth has been installed or where there has been any other significant modification or physical change to an existing spray booth, or significant change in the operation of an existing spray booth, after 29 June 2001;

**"new facility"** means any automotive refinishing facility that commenced operations after 29 June 2001;

**"operator"** includes:

- (a) a person who holds any interest in an automotive refinishing facility, including a lessee, but not including a secured creditor; and
- (b) a person who has management or control, direct or indirect, over the operations of an automotive refinishing facility;

**"owner"** means a person who is in possession of, has the right to control, or occupies or controls the operation of an automotive refinishing facility;

**"person"** includes a land owner, an owner, an operator and a government body and any director, officer, employee or agent of a person or government body;

**"registered operator"** means the operator of an automotive refinishing facility who has completed registration and paid both the registration fee and annual operating fee;

**“registration”** means the submission to Metro Vancouver Regional District of all required registration information for an automotive refinishing facility, and when payment of the registration fee and annual administrative fee is received for that facility;

**“registration fee”** means the fee payable upon the initial registration of an automotive refinishing facility;

**“spot cleaning”** means the use of surface cleaners, dispensed from a hand held spray bottle, to clean difficult-to-remove deposits and stains;

**“spot repair”** means automotive refinishing to repair minor surface damage and imperfections to a total surface area not exceeding 0.5 square metres (m<sup>2</sup>), and not employing more than 250 grams of coatings per hour or per unit;

**“spray booth”** means any enclosed structure or enclosed portion of a structure utilized to accommodate or carry out spray coating;

**“spray coating”** means the application of a coating to a motor vehicle or mobile equipment, or their parts using either high-volume low-pressure spray guns or an alternate spray system satisfactory to the district director, but excludes touch-up coating and the original coating applied at an original equipment manufacturing plant;

**“surface cleaner”** means a product used to prepare the surface of a motor vehicle or mobile equipment by removing unwanted matter from the surface before applying a coating, and excludes products used for cleaning automotive refinishing equipment and hand-held spray bottle spot cleaners used to prepare surfaces prior to sanding;

**“technician”** means any person who conducts automotive refinishing activities;

**“touch-up coating”** means a coating applied by brush or non-refillable hand-held aerosol container;

**“VOC concentration limit”** means the maximum VOC content for an automotive refinishing product set out in Appendix 1;

**“VOC content in products”** means the VOC content of automotive refinishing products and components of such products, as applied following the manufacturer’s instructions. VOC content in products must be expressed in grams per litre (g/l) and calculated in accordance with procedures set out in clauses 7 and 8 of the Federal Volatile Organic Compound (VOC) Concentration Limits for Automotive Refinishing Products Regulations (SOR/2009-197), as amended or replaced; and

**“volatile organic compound”** or **“VOC”** means volatile organic compounds that participate in atmospheric photochemical reactions and that are not excluded compounds.

## **Part 1 – Application and Scope of this Bylaw**

*Amended by Bylaw 1296, 2019*

- 5** No person may discharge, or cause, permit or allow the discharge of any air contaminant into the environment from automotive refinishing within the Metro Vancouver Regional District except in accordance with this Emission Regulation.

## **Part 2 – Registration and Fees**

*Amended by Bylaw 1296, 2019*

- 6** Every operator who causes, permits or allows the operation of an automotive refinishing facility must maintain a valid registration by:
- (1) providing registration information to the district director using the paper registration form or online registration system;
  - (2) paying the one-time registration fee of \$100; and
  - (3) paying the District an annual administrative fee of \$250 for that calendar year or portion thereof, payable by April 1 of each year, or upon registration if registration occurs after April 1 of that year.

*Amended by Bylaw 1296, 2019*

- 7** For certainty, if a registration fee or an annual administrative fee for an automotive refinishing facility is not paid with 75 days of the due date, the operator's registration is suspended and any automotive refinishing conducted at such facility is deemed not to be in compliance with this Emission Regulation.

*Deleted by Bylaw 1296, 2019*

- 8** Deleted.

*Deleted by Bylaw 1296, 2019*

- 9** Deleted.

*Deleted by Bylaw 1296, 2019*

- 10** Deleted.

## **Part 3 - General Requirements and Standard Conditions**

*Amended by Bylaw 1296, 2019*

- 11** Every operator must operate and maintain automotive refinishing facility works in accordance with good air contaminant emission control practice.

*Amended by Bylaw 1296, 2019*

- 12** Without limiting the requirements of section 11, no person conducting automotive refinishing shall discharge air contaminants that:
- (1) exceed zero percent opacity; or
  - (2) are observed beyond the automotive refinishing facility at which the automotive refinishing is being conducted.

## **Part 4 - Material, Equipment and Operating Requirements**

*Amended by Bylaw 1296, 2019*

- 13** Subject to section 13A, every person when conducting automotive refinishing must use only automotive refinishing products containing a VOC content that is less than or equal to the VOC concentration limit stipulated for that product, when prepared and applied in accordance with the manufacturer's instructions.

*Added by Bylaw 1296, 2019*

- 13A** Section 13 requirements with respect to VOC concentration limits do not apply to automotive refinishing products that are sold in containers having a volume less than 14.8 mL (0.5 fluid ounces).

*Amended by Bylaw 1296, 2019*

**14** Every person when spray coating at an automotive refinishing facility must:

- (1) employ and operate, either high-volume low-pressure spray guns or an alternate spray system satisfactory to the district director with a transfer efficiency equivalent to high-volume low-pressure spray systems, at the air pressure required to achieve maximum transfer efficiency; and
- (2) post at the automotive refinishing facility or otherwise have available for inspection by an officer notices supplied by the spray gun manufacturer setting out recommended spray gun operating parameters including the maximum inlet pressure, maximum atomizing air pressure and air cap number required to achieve the desired transfer efficiency.

*Amended by Bylaw 1296, 2019*

**15** Subject to section 16, every person conducting spray coating at an automotive refinishing facility must do so within a spray booth equipped with a ventilation system that is:

- (1) connected to an exhaust stack;
- (2) designed, installed and operated to prevent fugitive emissions in accordance with established engineering principles and in accordance with applicable laws and enactments;
- (3) equipped, on the exhaust side of the ventilation system, with paint overspray arrestors that:
  - (a) satisfy one of the following:
    - (i) two-stage, dual media, paint overspray arrestors comprising a primary strainer and a secondary filter, whether as separate filter elements or in combination;
    - (ii) rated by the manufacturer to capture 98% of paint overspray (with supporting documentation); or
    - (iii) approved by the district director;
  - (b) are installed in accordance with the manufacturer's instructions; and
  - (c) are replaced when saturated or pulling away from the frame edges, or as directed by the district director; and
- (4) activated at all times when spray coating is carried out and thereafter for the time required to cure the coating to a dust-free state as recommended by the manufacturer of the coating used.

*Amended by Bylaw 1296, 2019*

**16** Despite section 15, the requirements of section 15 do not apply to a person conducting a spot repair; however, a person conducting a spot repair must at all times employ any works or equipment necessary to prevent the discharge of an air contaminant being observed beyond the automotive refinishing facility.

*Added by Bylaw 1296, 2019*

- 16A** A mobile refinishing operation must not conduct any automotive refinishing activity except for spot repair, and must not operate at the same location:
- (1) for more than five (5) consecutive calendar days; or
  - (2) for more than fourteen (14) days of a calendar month.

*Amended by Bylaw 1296, 2019*

- 17** Every operator of a new automotive refinishing facility, a modified automotive refinishing facility or any other automotive refinishing facility designated by the district director must ensure that the ventilation stack discharge systems for any spray booth, paint mix room and any other air contaminant emission control system are designed, constructed and installed in accordance with good engineering practice (GEP) stack height. GEP must be determined by a professional engineer, licensed to practice in the Province of British Columbia, whose area of professional specialty includes industrial ventilation. In addition, ventilation stack discharge systems must:
- (1) be located away from air intakes of adjacent buildings including windows and balconies
  - (2) discharge stack gases vertically, without obstruction by the addition of a rain cap or other appurtenance; and
  - (3) discharge stack gases at a minimum velocity of 15 metres/second.
- 18** Every operator must employ for the cleaning and maintenance of spray application equipment used in spray coating:
- (1) an enclosed spray gun wash system or a low emission spray gun cleaner; and
  - (2) organic gun wash solvents having a vapour pressure of not more than 6.0 kilopascals (45 mm Hg) at 20°C.

*Amended by Bylaw 1296, 2019*

- 19** Every person conducting automotive refinishing at an automotive refinishing facility must employ good housekeeping practices to reduce the discharge of air contaminants, including, without limitation:
- (1) using only measured quantities of VOC containing products;
  - (2) storing, disposing and shipping all VOC containing materials in closed non-leaking non-absorbent containers;
  - (3) promptly cleaning up all spills of materials containing VOC; and
  - (4) ensuring that automotive refinishing activities other than spray coating are conducted with emission controls sufficient to ensure that the requirements of sections 11 and 12 are met.

*Amended by Bylaw 1296, 2019*

- 20** Every operator must:
- (1) effective January 1, 2021, successfully complete an environmental training program and certification, at a frequency of every 2 years;
  - (2) ensure that every technician employed by the operator has successfully completed an environmental training program and certification;
  - (3) effective January 1, 2021, ensure that every technician employed by the operator successfully completes an environmental training program and certification, at a frequency of every 2 years; and
  - (4) display the environmental training program certifications for the operator and each technician at the automotive refinishing facility so that they are visible to the public, or otherwise have the certifications available for inspection by an officer.



## **Part 5 - Process Monitoring, Record Keeping and Reporting Requirements**

*Amended by Bylaw 1296, 2019*

**21** Every operator must keep, in accordance with section 22, accurate records and supporting documentation setting out, in respect of each of its automotive refinishing facilities:

- (1) a record of the types and amounts of products used which contain VOC, and included for each product:
  - (a) the product brand name and category,
  - (b) the product mixing instructions as stated on the container or in literature supplied by the manufacturer or supplier,
  - (c) the maximum VOC content in coatings for the products and coatings systems, as applied,
  - (d) the name and mailing address of the manufacturer or supplier, and
  - (e) the name and signature of an employee responsible for making the record;
- (2) a record of the types and amounts of coatings used for spot repair, including but not limited to the quantity of coatings used per hour or per unit refinished, and the quantity of coatings used per day and per week;
- (3) a record of materials and residuals containing VOC sent for recycling or disposal, which sets out the types and amounts of such waste, the method and route for disposal or recycling, and the name and address of the company collecting the materials and residuals;
- (4) a record of all inspections and maintenance conducted on all equipment used in automotive refinishing, as required in section 11, which sets out:
  - (a) the date and time of the inspection or maintenance,
  - (b) the condition of the works or other equipment observed during the inspection or maintenance, and
  - (c) the name and signature of the person who is responsible and able to verify the information contained in the record;
- (5) a record of the environmental training program and certifications completed by the operator and each technician engaged in automotive refinishing or spray coating; and
- (6) for any mobile refinishing operation, a record of all locations at which the mobile refinishing operation has conducted automotive refinishing.

*Amended by Bylaw 1296, 2019*

**22** Every operator must:

- (1) keep all records and supporting documentation for at least 3 years after the date of preparation or receipt;
- (2) upon the request of the district director or an officer, produce for inspection any records or supporting documentation kept under section 21 within 48 hours of such request; and

- (3) upon the request of the district director or an officer, deliver copies of any records or supporting documentation kept under section 0 to the district director or an officer within 48 hours of such request.

*Added by Bylaw 1296, 2019*

- 23** Every person must, immediately upon the request of the district director or an officer, provide proof of identity and any other information the district director or officer deems necessary to ensure compliance with this Emission Regulation.

*Added by Bylaw 1296, 2019*

#### **Part 6 - Offences**

- 24** A person who provides false information in a registration application, a report or other submission of information, or to an officer or the district director in response to a request to produce records or other information, commits an offence and is liable on conviction to a fine not exceeding \$200,000.

*Added by Bylaw 1296, 2019*

- 25** A person who contravenes any provision of this bylaw commits an offence and is liable on conviction to a fine not exceeding \$200,000.

*Added by Bylaw 1296, 2019*

- 26** Where there is an offence that continues for more than one day, separate fines each not exceeding the maximum fine for that offence may be imposed for each day or part thereof in respect of which the offence occurs or continues.

*Added by Bylaw 1296, 2019*

- 27** Nothing in this bylaw limits the district director or the Metro Vancouver Regional District from utilizing any other remedy that would otherwise be available at law.

**Appendix 1**  
**VOC Concentration Limits for Automotive Refinishing Products**

*Amended by Bylaw 1296, 2019*

<b>Product Category</b>	<b>Definition / Description</b>	<b>Maximum VOC Content in Product (g /L)</b>
<b>COATINGS</b>		
Primer Surfacer	A coating formulated to be applied for corrosion resistance, adhesion of subsequent coatings or to fill in surface imperfections. Adhesion promoters are not included in this category.	250
Primer Sealer	A coating formulated to be applied before the application of another coating for the purpose of colour uniformity or to prevent a subsequent coating from penetrating underlying coatings.	340
Pre-Treatment Wash Primer	A coating that contains a minimum of 0.5% acid by weight and not more than 16% solids by weight that is formulated to be applied directly to bare metal surfaces to provide corrosion resistance and to facilitate adhesion of subsequent coatings.	660
Adhesion Promoter	A coating formulated to be applied to uncoated plastic surfaces to facilitate adhesion of subsequent coatings	840
Colour Coating	A pigmented coating formulated to be applied to a primer or an adhesion promoter that requires a subsequent clear coating. This category includes metallic or iridescent colour coatings.	420
Uniform Finish Coating	A coating formulated to be applied to an area of repair for the purpose of blending it to match the finish of the rest of the surface.	540
Truck Bed Liner Coating	A coating that protects a truck bed from surface abrasion. Colour coatings, multicolour coatings and single-stage coatings are excluded.	310
Temporary Protective Coating	A coating that temporarily protects certain areas from overspray or mechanical damage.	60
Underbody Coating	A coating formulated to be applied to the wheel wells, the inside of door panels or fenders, the underside of a trunk or hood or the underside of a motor vehicle.	430

**Appendix 1 (continued)**  
**VOC Concentration Limits for Automotive Refinishing Products**

Single-Stage Coating	A pigmented coating formulated to be applied without a subsequent clear coat. Single-stage coatings include single-stage metallic or iridescent colour coatings.	420
Multicolour Coating	A coating that exhibits more than one colour in the dried coat after a single application, hides surface defects and is formulated to be applied over a primer or adhesion promoter. This category includes metallic or iridescent multicolour coatings.	680
Clear Coating	A coating that contains no pigments and is formulated to be applied over any other coating.	250
Other Coatings	All other coatings not described in this appendix.	250
<b>SURFACE CLEANERS</b>		
Surface Cleaners		50