

The Vehicle Refinishing Draft Guidelines

2007 Regulations

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Background

1999

**EU Directive on
limiting solvent
emissions**



2004

**Amended by
another EU
Directive on
deco-paints**

2002

**Irish solvent
Regulations
implementing
the 1999
Directive**

2007

**Irish deco-
paints
Regulations
implementing
the 2004
Directive**

Sectors Affected

2002 Regulations

- *Dry cleaners*
- *Painting of Products*
- *Cleaning of Products*
- *Pharmaceutical manufacture*
- *Paint manufacture*
- *Printing*

Vehicle Refinishing

2007 Regulations

- *Decorative paints & varnishes*

Vehicle Refinishing

EPA Work to Implement the 2 sets of Regulations

- *Best Practice Guidelines - 2002/3*
 - *VR, dry cleaning, surface cleaning*
- *AIC Protocol*
- *Pilot Audits in VR and dry cleaning*
- *Plain Guide*
- *2007 - VR Best Practice Guidelines*

Vehicle Refinishing

2002 Regulations

coating of road vehicles,
or part of them,
carried out as part of vehicle
repair, conservation or
decoration outside of
manufacturing installations

original coating of road
vehicles, or part of them,
with refinishing-type materials,
away from the original
manufacturing line

coating of trailers

2007 Regulations

coating of road vehicles,
or part of them,
carried out as part of vehicle
repair, conservation or
decoration outside of
manufacturing installations

Key Differences

- *2007 Regulations apply to all operators - no threshold*
- *Registration only every 2 years*
- *Requirements not as in-depth/complicated (my opinion)*

A “vehicle refinishing installation”
means:

any industrial or commercial activity
and associated degreasing
activities performing vehicle
refinishing

The Best Practice Guidelines

- *Divided into 2 sections*
 - What you **MUST** do
 - *Mandatory practices under the Regulations*
 - What you should **CONSIDER** doing
 - *State-of-the-art for the industry*

The Best Practice Guidelines

- *Note:*

"Vehicle Refinishing for Repair"

Short for

***"Vehicle Refinishing for Repair,
conservation or decoration"***

PART 1: What you MUST do

- **Use compliant products**
- **Use HVLP spray guns**
- **Use gunwashing equipment**
- **Meet requirements for:**
 - Management
 - Training
 - Storage
 - Waste

PART 1: What you MUST do

WHEN?

- *Will have to be registered by 1st March 2008*
- *Use compliant products only from 1 January 2008*
 - *Can use non-compliant products until 1 Jan 2008, but only where these were produced before 1 January 2007*

PART 1: What you MUST do

WHEN?

- *Will have to be registered by 1st March 2008*

HOW?

- *Will also operate under the AIC system*
 - *Compile documentation*
 - *Get AIC*
 - *Submit to local authority*

PART 1: What you MUST do

HOW OFTEN?

- ***Renew Cert every 2 years***
- ***Cer. for all businesses existing on 1 March 2008 will expire on 1 March 2010.***
- ***Certificates issued for new businesses will last for two years from date of issue***

PART 1: **What you MUST do**

Use compliant products

Category of product		Max VOC content (g/l ready for use) (ex. water content of the product ready for use for types b to e)
<i>a</i> Preparatory & cleaning	Preparatory (gunwash, paint strippers, degreasers and silicone removers)	850
	Pre-cleaner	200
<i>b</i> Bodyfiller/ stopper	All types	250
<i>c</i> Primer	Surface/filler & general (metal) primer	540
	Wash primer	780
<i>d</i> Top coat	All types (base coatings and clear coating)	420
<i>e</i> Special finishes	All types	840

As per CEPE 1999

PART 1: **What you MUST do**

Use compliant products

- Base-coat and Topcoat
 - Limit 420 g/l
 - High solids or water based

PART 1: **What you MUST do**

Use compliant products

- Compliant Products - how do you know?
- check the label, or MSDS, or
- ask paint supplier

PART 1: **What you MUST do**

Use compliant products

label must show:

- *Which category of product it is (primer, top-coat, etc.)*
- *The associated max VOC limit under the 2007 Regulations*
- *The actual VOC content (g/l) of the product in a ready to use condition*

PART 1: **What you MUST do**

Use compliant products

- ***If in doubt, don't use the product before checking with your supplier***

PART 1: **What you MUST do**

Use compliant products

- ***From 1 January 2008:***
 - ***if sold a non-compliant product, or***
 - ***does not have the required labelling,***

inform the EPA

Don't use the product

PART 1: **What you MUST do**

Use compliant products

- ***Vintage Vehicle Exemption:***
 - ***Must get a written permit from Department of Environment***
 - ***While vintage vehicles are defined for the purposes of motor taxation as a vehicle that is 30 or more years old, only vintage vehicles that have particular historical and cultural value are allowed***

PART 1: *What you MUST do*

Use HVLP spray guns

- **High Volume Low Pressure (HVLP) spray guns must be used**

HVLP - Some Advantages

- Despite high volumes of air, lower pressure means considerably less bounce back and spray fog than conventional guns
- Reducing overspray - increases spray-booth filter life
- High quality finishes can be achieved - already used by many bodyshops
- higher transfer efficiency - less waste and lower costs per job
- reduction in paint use - won't have to refill the cup as often
- Better coverage of recesses and cavities

PART 1: *What you MUST do*

Use gunwashing equipment

- **Use gunwashing equipment**
 - **Can be manual or automatic**

PART 1: **What you MUST do**

Meet Managment requirements

*Adequate supervision and training
obligation on the operator to inform the
local authority where a breach of the
Regulations has occurred*

*operator must take all necessary measures
to ensure compliance is restored within
the shortest possible time.*

*Where non-compliance poses immediate
danger to human health, the operator
must suspend operation of the activity
until such situation is remedied*

PART 1: **What you MUST do**

Meet Training requirements

- **List of names: sprayers, paint mixers**
- **All such staff trained**
 - *as part of apprenticeship training, or*
 - *from equipment suppliers, or*
 - *from training in-house from another member of staff who has already been trained*

Written records

Training

- *correct operation of spray equipment and spray techniques to minimise overspray*
- *spray gun cleaning that minimises VOC emissions*
- *Storage and handling of products and wastes*

Training Records

- *dates of training*
- *what the training consisted of*
- *the staff (providing the training and those being trained)*
- *names and signatures*

PART 1: **What you MUST do**

**Meet Storage requirements -
solvent containing products and
waste**

- **Use suitable containers, check for leaks**
- **Closing containers**
- **Label waste containers**
- **No drains that could be affected by a spill in VOC areas**
- **Keep a spill kit**
- **Secure ventilated storage area**

Meet Waste requirements

- *VOC-containing liquid wastes - collect in appropriate, closed containers for disposal or recovery*
- *waste gun-wash, leftover paints, etc.*
- *VOC-containing solid wastes - collect in dedicated closed containers for disposal or recovery*
 - *waste cloths/rags/paper containing VOCs, any unused bodyfiller, waste spraybooth filters, waste paint solids containing VOCs, etc.*

PART 1: **What you MUST do**

Meet Waste requirements

- *Try to maximise recovery - e.g. gunwash*
- *Licensed companies*
- *Keep documentation on file*
- *No solvent to municipal waste, drains, ground, etc.*

Preparation for the Inspection

- *List of VR products*
- *Check labelling / compliance*
- *Record litres purchased*
- *Waste documentation*
- *List of personnel - spraying; mixing*
- *Records of training*
- *Procedure for checking labels on good inwards*

Offences under the Regulations

- ***fine of up to €3,000, or 12 months imprisonment, or both***

- *Part 1 also contains:*
- *Preparing for the AIC inspection*
- *Checklist*
- *Dos and don'ts*
- *What will happen in the inspection*

***PART 2:* What you should CONSIDER doing**

State-of-the-art for the industry

Act as a guide

Useful for specifying new equipment

PART 2: **State-of-the-art for the industry**

- *Where possible use of alternatives such as*
 - *Dry guide coat, scratch/chip repair systems, paintless dent*
- *For coatings in use*
 - *Compare actual VOC content versus limit*
 - *Set priorities*
 - *Similarly for any materials classed as hazardous to health*
 - *Look at commercially available alternatives with lower VOC content beyond complaint coatings*
 - *Keep eye on developments - UV-A, CO₂*

PART 2: *State-of-the-art for the industry*

- *Equipment*
 - *Gravity cups*
 - *Roller for un-seen areas*
 - *Large scale - remote pumped feed*

PART 2: **State-of-the-art for the industry**

- **Booths**

- **optimal air flow rates & minimum air turbulence.**
- **Design minimise overspray on lighting & walls**
- **minimise energy use**
 - **recirculating air-flow during curing phase,**
 - **heat exchange between the exhaust/incoming air,**
 - **programmable painting and curing times,**
 - **automatic switching to idling mode when not spraying,**
 - **variable speed drive motors on extraction system.**
- **spray booth lighting - designed for optimal level; regular cleaning**
- **booth walls that are coated white - increase lighting effectiveness**
- **Establish optimal air flow-rate**
- **Regularly replacing filters**
- **Keep clear of clutter**

PART 2: **State-of-the-art for the industry**

- *Excellent practice for spray gun cleaning : -*
- *Use of gun cleaning equipment which: ○*
- *Is automated.. ○*
- *Re-circulates, filters and reuses gun-wash during the cleaning operation. ○*
- *Recovers spray out rather than let it vent to the extraction system. ○*
- *Sends spent solvent to an enclosed container for eventual off- site recovery and reuse. ○*
- *Is covered. ○*
- *Is ventilated but kept to the minimum required for occupational health.*

PART 2: **State-of-the-art for the industry**

Other areas covered

- *Compressed Air Supply*
- *Benchmarking*
- *Surface Preparation*
- *Paint Mixing*
- *Refinishing Operation*
- *Drying*
- *Material Handling*
- *Maintenance*

A copy of the Draft Guidelines

www.epa.ie



The screenshot shows the EPA Ireland website interface. A red arrow points to the link for the 'Draft CoP: Wastewater Treatment Systems for Single Houses' consultation document. The website layout includes a header with the EPA logo and navigation links, a main content area with various sections, and a footer with contact information and legal notices.

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 Draft [CoP: Wastewater Treatment Systems for Single Houses](#) open for consultation
Draft [VR consultation document](#) now open
Consultation document on [Air Guidance Note on the Implementation of I.S. EN 14181 Water Framework Directive consultation](#) in relation to Proposed Quality Standards for Surface Water Classification

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Feedback on the Consultation

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Plan from here

- *All submissions made will be taken into consideration in finalising the Guidelines*
- *Then forwarded to the Minister for approval*
- *Issue the approved Guidelines*