

Paint Spraying Operations - Property

Paint spraying and finishing operations are undertaken in many trades and businesses, however they present a number of risk concerns requiring careful management.

This Loss Prevention Standard describes the main types of spraying activity, the associated hazards and provides guidance on reducing the potential for loss or damage.

Paint Spraying Operations - Property

Introduction

Paint spray application is a very hazardous activity that can result in fire and explosion incidents.

From simple handheld spraying repairs to automated manufacturing processes, the atomisation and application of flammable paints and solvents can create combustible and explosive atmospheres, requiring careful management to avoid ignition, and subsequent loss incidents, as illustrated by this [spray booth fire in London in February 2002](#) or this [fire incident in Cornwall in May 2024](#) where fire destroyed a building used for paint spraying operations.



This document provides an overview of the main risks associated with paint spray operations and offers useful guidance on reducing the potential for loss or damage.

Note: This document is focussed on Property loss prevention in relation to paint spray operations. It is not intended to address Liability exposures nor flammable or combustible liquid/paint storage or the associated mixing; the application of powder coatings using electrostatic means; post-spraying paint drying or baking ovens or the use of cellulose-based materials. The presumption is that all regulatory requirements, such as Fire Risk Assessments, have been met.

Type of Activity

Paint spray operations can be as basic as the use of aerosol paint cans for minor repairs in workshops, through to a fully automated process within a flow-through spray booth, or an aircraft hangar cell. Regardless of the size of the activity the process hazards are fairly consistent, and include:

Open Air. The spraying operation is completed in the open, with no dedicated paint spraying enclosure structure or mechanical extraction.

Spray Booths. These are enclosures that can be open faced or fitted with doors or blinds, and feature an integrated air intake and extraction system, usually incorporating a filter media (wet or dry). These can be permanent structures or moveable but are generally compact structures located within buildings for relatively small painting tasks.

Spray Rooms. These are enclosed areas, typically larger than spray booths and used for spraying multiple individual components or larger items such as furniture or individual vehicles.

Smart Spraying/Spray Cells. Generally larger automated processes where objects are supplied in series to a controlled process line that then automatically sprays the item.

Automatic and/or Manual Application

The application processes can be manual or automated. Manual, as the name suggests, is a hand-operated process by an individual, typically using a spray gun.

Automated processes are typically undertaken in purpose-built enclosures via automatically controlled, pre-programmed spray operations. Typical features include:

- Paint and thinners, etc., are not piped into the spray nozzle directly.
- Automated paint supply cabinets or chambers may be provided.
- Can be pneumatic, electric or electrostatic whereby conveyed objects are coated.

Low and/or High-Pressure Application

The pressure of the paint supplied can be low pressure or high pressure. This together with the spray nozzle type and the nature of the liquid/material being sprayed will have an impact on the number and size of droplets created and the amount of any vapour evolved.

Electrostatic Application

Electrostatic application and powder coating is not covered in any detail in this document; however, it uses positively charged paint particles/droplets from a specialized gun to coat grounded/earthed metal surfaces. The grounded/earthed object attracts the charged paint particles/droplets. If balanced correctly there should be less wastage and 'overspray' from such operations.

Note: If the separation distance from the spray nozzle to the object being sprayed is too small or there are issues with the earthing, etc., the process can cause an electric arc discharge creating its own ignition source.

Understanding the Risks

Paint spraying creates a number of hazards requiring careful management. These include, but are not limited to:

Flammable Materials Storage. Flammable/highly flammable paints, solvents such as thinners, methylated spirits, cleaning liquids, etc., are likely to be held in storage. These can spill, leak, drip, etc., and potentially spread from storage locations to drainage systems, creating an explosion or fire hazard.

Electrical. Inappropriate or incorrectly specified electrical equipment may spark and create an ignition risk in potentially flammable atmospheres.

Sparking. The use of inappropriate tools (e.g., hand tools) or incorrectly specified mechanical equipment (e.g., fan in the spray area extraction), increase the potential for a spark to be created in a flammable atmosphere.

Aerosols. Aerosol cans can contain highly flammable agents, which when heated can become explosive. Storing at inappropriate temperatures can create increased potential for explosive and/or missing events.

Cleaning. Spray guns and other paint spray equipment require careful attention when being cleaned. Common poor practice and the use of unlisted/non approved receptacles can result in flammable atmospheres being created or spillages occurring, which can then ignite, if an ignition source is introduced e.g., light switch or static spark, etc.

Extraction. Combustible deposits can accumulate on and within extraction systems, which can ignite.

Overspray. Paint can extend beyond the items being sprayed on to other surfaces, equipment, fittings, etc., and especially within the extraction/filter system. This increases the fire load within the spraying area and also within many areas not normally visible.

Static. The use of some solvents and paints, the objects being sprayed, the equipment being used, operator clothing/footwear, etc., can all generate static. A static discharge can-ignite a flammable atmosphere created by the use of the solvents and/or paints, or from the atomised droplets of paint being sprayed.

Curing. Inappropriate temporary or permanent heaters may be used to speed up drying processes.

Self-combustion. Certain materials including overspray sludges, solvent soaked rags and cleaning cloths can oxidise and overheat, eventually self-combusting.

The potential for fire propagation can be aided by:

Fire Load. This is the amount of combustible material that could support fire growth, and includes obvious items such as paint stock and packaging, other goods/stock, pallets, etc., but could also include vehicles, particularly electric vehicles with large lithium-ion battery modules or vehicles with large fuel reserves and combustible fittings and components. Individual buildings may also feature a high proportion of combustible construction which would support fire growth.

Fire Penetrations. Air bricks, ventilation, extraction, electrical systems, etc., can bypass a buildings fire barriers. Inadequate or defective fire compartmentation and stopping can also allow fire to spread into and through the property.

Combustibility. Paint related waste such as old paper filters, cleaning rags, etc., are likely to be easily ignitable and support rapid fire growth.

Fire Detection and Protection. Lack of, or inappropriately/incorrectly specified fire detection, protection and associated safety interlocks can result in uncontrolled fire development.

Risk Assessment

Risk Assessment

If there is a risk of explosion/fire in relation to the materials used at the premises, e.g., paints, solvents, thinners, etc., a formal documented risk assessment should be completed and any corrective actions implemented promptly.

In the United Kingdom this is typically addressed within the various home nation fire risk assessment based legislation, and the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR), which require identification of any “Hazardous Areas” of the premises where explosive atmospheres may be present, and classifying them as either Zone 0, 1 or 2 depending on the frequency with which an explosive atmosphere may be present.

- This assessment should be completed by a competent person and any corrective actions monitored until completion.
- Any hazardous areas should be clearly identified and signed.
- Any electrical equipment installed in these areas should be suitably designed and marked as being suitable for use in the appropriate zoned area.
- The risks of static discharge, sparking and related explosion should also be considered.
- Consideration should be given to motors, control panels, lighting, and other powered equipment in the hazardous areas.
- Any zoned or classified areas should be identified by appropriate markings and signage in the area.

Note: Statutory risk assessments are deemed the minimum requirement, and following the recommendations in this document can help further reduce the risk and exposures.

Material Damage Risk Assessment

Before initiating risk management controls or installing any additional fire detection and protection systems, an assessment of the anticipated/possible financial losses, for both the material damage and business interruption exposures, in the event of a significant or catastrophic loss event should also be undertaken.

This helps ensure that management programmes, risk controls, fire detection and protection systems, etc., are sufficient and reflective of the potential property loss estimates.

Refer to the Aviva Loss Prevention Standards **Material Damage Risk Assessment** and **Business Impact Analysis** for further guidance.

Managing Change

Any proposed changes to business activities, equipment and the premises for risk management purposes should be managed through a formal Management of Change process. This helps ensure all stages of any change are progressed with minimal exposure to the existing arrangements. This is especially important for high hazard activities such as paint spraying.

- Any proposed changes should also be discussed with your Property Insurer and Insurance Broker.

Refer to the Aviva Loss Prevention Standards **Managing Change** for further guidance.

Managing the Risks

When considering how to control and manage the exposure of paint spraying, all aspects of the arrangements should be considered:

Location, Construction & Fire Compartmentation

Paint spraying operations should ideally be in a separate detached building, remote to the main premises. This helps reduce the potential for any fires involving paint spray operations impacting other business activities.

Where this is not possible, the paint spraying areas should be located within a dedicated compartment providing at least 90 minutes fire resistance (integrity and insulation) from other areas of the premises. This includes any windows and/or doors, extraction ducting routes, etc.

- Any windows/glazing should be fixed closed/suitably sealed during spraying operations to confine vapours, mists, residues, dusts and deposits to the spray area.
- All doors to the spraying enclosure should be self-closing and kept closed during spraying activities. Where possible interlock such doors to the paint spraying equipment, preventing operation whilst any doors are open.

Important: The compartment fire resistance rating may need to be increased based on the values exposed and hazards. Consult your Property Insurer and Broker for further guidance.

Refer Aviva Loss Prevention Standards **Fire Compartmentation, Fire Doors, Fire Shutters and Fire Dampers** and **Heat and Smoke Venting Systems** for further guidance.

Filter Media, Ventilation and Extraction

An extraction system should be present within spray areas to exhaust vapours and paint droplets created during spraying operations.

- The entire ventilation system should be rated as suitable for use in potentially flammable atmospheres as appropriate.
- Separate ventilation systems should be considered for each spray area/booth.
- Manifoldd ventilation systems connecting individual spray booths should not be installed.
 - ✓ Manifoldd systems can allow flammable vapours to spread between booths, increasing the risk of ignition.
- The paint spraying activities should be interlocked so that it cannot commence until the ventilation has been operable for at least two minutes.
 - ✓ The ventilation should also continue for at least five minutes after the paint spraying process has ceased.
 - ✓ If an automatic timer is used, means of immediate shutdown should be provided in an emergency, e.g., fire alarm. This should be via an interlock and the provision of an emergency stop button, located remote from the spray areas.
- The air supply/intake should be fitted with filters to reduce contaminants (dust, particulates, etc.) entering the spray area.
 - ✓ This will help reduce deposits on the sprayed item and help create an air flow pattern that helps distribute the sprayed paint.

- Intake and extraction fans and motors should
 - ✓ Be rated for use in ducting where potentially flammable atmospheres may be present.
 - ✓ Exhaust motors should not be located within the ductwork itself.
 - ✓ Fans should be non-sparking.
 - ✓ Incorporate automatic low flow/air failure alarms, interlocked to isolate safely upon activation.
- The extraction ducting should:
 - ✓ Be as direct as possible to the outside.
 - ✓ Contain as few bends as possible.
 - This increases particle deposition, when the air flow changes direction.
 - ✓ Have appropriate inspection and cleaning hatches along its entire route so the entire duct can be visually inspected internally.
 - ✓ Terminate with the discharge point away from any air intakes, potential ignition sources, etc.
- Air Replenishment Units:
 - ✓ Any gas powered, electric or hot water heated heaters or humidification / dehumidification units for heating and filtration should:
 - Be specifically considered within the risk assessment.
 - Feature safety interlocks linked to gas flow and flame failure, power shut down as necessary.
 - Incorporate non-combustible filtration.
 - Be monitored and interlocked for airflow and not just motor operation (as above).
- Any removable filters should be removed and replaced in line with OEM guidelines and usage rates/performance.
 - ✓ Filter linings should be non-combustible or approved as having a low flame spread rating and be fire resistant.
 - ✓ Unused/clean filters should be stored in an appropriate area away from the booth/spray area.
 - ✓ Used/soiled materials should be treated as combustible waste and managed accordingly. If there is any potential for self-heating/spontaneous combustion then manage as above.
- Wet filtration systems should be cleaned regularly to remove any accumulations of combustible residues. This includes within the sump and eliminator areas of the booth.

Paint Spray Equipment

The nature of the paint spray equipment should be fully understood and considered in the risk assessment and the associated risk management and detection, protection and interlock strategy.

Consider if the paint spray equipment itself is electrically powered or pneumatically driven, when considering the need for safety interlocks to:

- Ventilation operation.
- Door closure.
- Earthing and grounding systems.
- Automatic fire detection or suppression activation or isolation alarms, etc.

The choice of paint spray equipment can have an impact on the practicalities of such safety controls.

In addition to automatic interlocks, a manual shutdown should also be provided in a readily accessible and safe location outside of the paint spray area. This will enable the paint spray activities to be isolated quickly in an emergency.

Electrical Equipment

Any electrical devices proposed to be used in or close to any area using, handling or exhausting potentially flammable atmospheres should be appropriately rated for use in areas where flammable vapours may be present.

- This should be as identified via risk assessment, electrical zoned drawings, etc.
- Ensure equipment is subject to regular self-inspection to check for damage, unsuitable equipment, exposed cabling, etc., and formal inspection, testing and maintenance in accordance with national regulations, standards and codes.
- Workers should be made aware of the exposure from inappropriately classified electrical devices and all personal devices (including mobile phones) should be prohibited.

Refer Aviva Loss Prevention Standard **Electrical Installations - Inspection and Testing for further guidance.**

Static

Static is one of the primary causes of ignition in paint spray activities. The energy released in a static electricity discharge varies over a wide range. A relatively small energy, often as little as 0.2-2 millijoules, can ignite flammable atmospheres such as paint vapours.

- The risks of fire or explosion as a result of static charge/discharge should be considered via risk assessment.
- Unless a specifically designed electrostatic paint spray operation, all elements of the booth, the item being sprayed, the spray gun, the person completing the spraying, etc. should be appropriately earthed.
 - ✓ Consideration should also be given to providing operatives working in the general area, not just those undertaking spray operations, with anti-static clothing (including gloves) and footwear.
- Personnel should ideally pass an earth test prior to entering the paint spray area.
 - ✓ This can be confirmed with appropriate wrist and stand-on footwear resistance test stations.
- The resistance to earth of metal surfaces in the spray area should not exceed 1 ohm.
- Spray guns should be interlocked to prevent operation without appropriate earthing.
- Plastic items for transfer of flammable fluids should be prohibited and only vessels capable of being earthed should be used.
 - ✓ This should include any plastic or rubber gasketed joints, flexible connections and couplings and vessels used for dispensing purposes.
- Any items that are coated in paint/overspray cannot be earthed/grounded unless the coating is removed.
- Earthing connections should be visually checked and recorded regularly.
 - ✓ This is especially important after any maintenance works or other changes.
- Earthing connections should be tested annually or after any changes, to assure the resistivity in the earth loop is still appropriate.

Training

Because of the high hazard nature of paint spray activities, only individuals trained to understand the hazards posed by these areas and to work in those areas should be permitted within them. This includes the paint spray operatives, any contractors, cleaners, etc.

Housekeeping

- The spray area, extraction network and immediate surroundings should be maintained clean and tidy with no storage of ordinary or waste materials.
 - ✓ The spray area should only be used for spraying.
 - ✓ All waste materials should be removed immediately to non-combustible, self-closing lidded bins. This includes personal protective coverings, tape, wipes, etc. These bins should be located outside of the spraying area.
 - ✓ Any waste that can self-heat, should be segregated from other waste in dedicated non-combustible, self-closing lidded bins.
 - ✓ All paint spray related waste should be removed from buildings outside of operational hours, e.g., overnight, weekends, etc., and stored in appropriately segregated waste receptacles at least 10 metres from buildings.
 - Ensure waste receptacles are clearly identifiable as containing flammable materials.
 - Prohibit any hazardous activities near such stores.
 - Ensure that any materials assessed as being potentially self-heating/potentially spontaneously combustible are totally segregated away from all other waste in metal lidded bins.
- Any air intake or exhaust filters should be replaced based on booth usage, contamination, booth performance and the Original Equipment Manufacturers (OEM) recommendations. Ideally all replacement filters should be non-combustible. Contaminated filters should be removed immediately and stored in appropriate waste receptacles as above.
- All areas of the extraction equipment/network including plenums, sumps, extraction ducting, etc., should be subject to a formal inspection programme and cleaning programme.
 - ✓ The frequency of cleaning should be determined via risk assessment and should consider:
 - The nature of operations.
 - Periods of usage.
 - Flammability of materials.
 - Amount of residue, overspray dust, etc., generated.
 - Original Equipment Manufacturers (OEM), and installer recommendations.
- The top of the roof of any spray booths/rooms should not be used for storage and should be maintained clear from any materials.
- The interior wall surface finish of the paint spray area should be smooth to assist with cleaning operations and to prevent overspray buildup.
- Scrapings and sweepings from spray deposits should be placed immediately in normally closed metal receptacles with metal lids (or self-closing normally closed non-combustible safety bin), wetted down and removed from the premises to external waste receptacles located at least 10 metres from buildings and other valuable assets pending removal. Any scrapers, etc. used to remove any deposits must be non-sparking.

- Cleaning solvents should not be kept within the paint spray area. If these are classed as combustible to flammable liquids, then these should be housed in appropriately approved/listed flammable liquids cabinets, in a separate area and only brought into the spray area when needed.
 - ✓ Cleaning solvents should never be used with mops and buckets or stored in open top drums/receptacles.
 - ✓ Cleaning solvents should only be used with appropriately listed normally closed safety containers.
 - ✓ Ensure cleaning guns are not soaked in open top drums/receptacles. Any cleaning only to be completed with appropriately listed safety containers.
- Non-combustible absorbent material should be readily available for soaking up any spillages.
 - ✓ The soiled material should be deposited in a metal receptacle with a metal lid (or self-closing normally closed non-combustible safety bin) and removed externally, at least 10 metres from buildings and other valuable assets pending removal.
- Hooks used for hanging items being sprayed should be thoroughly cleaned at least weekly, regularly to remove combustible residues, as above, especially if the item passes into a drying or baking oven after leaving the spraying area.
- Any tools used within areas where flammable atmospheres may be present should be non-sparking.

Important: Consult your Property Insurer and Broker for further guidance relating to policy conditions regarding storage of flammable materials and cleaning regimes.

Self-Inspection

Regular self-inspections of the spray area should be completed by responsible persons to ensure compliance with waste storage and housekeeping rules and standards.

The frequency of inspections will vary depending on the nature of the premises and spray-painting activities undertaken, however, at least daily checks and weekly thorough formal inspections should be undertaken.

- Ensure daily checks are undertaken prior to work commencing, e.g., correct clothing is being worn, all spray related equipment including ventilation and extraction systems are functioning normally, no flammable liquids or sprayed waste are present, earthing equipment is working correctly, no mobile telephones are being carried, etc.
- Ensure the self-inspections adequately address the housekeeping issues associated with paint spraying activities, e.g., overspray, use and storage of solvents, dust and residue accumulations, extraction ducting, earth bonding, etc.
- The use of photographic evidence with such inspections, using a camera appropriately rated for use in environments where flammable vapours may be present, can prove invaluable.

The Aviva Loss Prevention Standard **Self-Inspections** and **Flammable Liquids** provides useful guidance in this regard.

Maintenance

Ensure appropriate Planned Preventative Maintenance (PPM) programmes are in place for spray booths, and other associated equipment based on Original Equipment Manufacturer (OEM) instructions and industry best practice.

- Spray booths and any ventilation systems should be inspected in line with any regulatory requirements, such as the Control of Substances Hazardous to Health (CoSHH) in the United Kingdom.
- Filters should be replaced before recommended replacement periods and appropriately disposed of – see **Housekeeping** above.
- Earthing continuity should be subject to at least monthly checks.

Refer to Aviva Loss Prevention Standard **Maintenance Regimes** for further guidance.

Hot Work Operations

Any hot work activities, which includes the use of welding equipment, blowtorches, grinders, drilling and brazing, etc., at the premises should be:

- Prohibited within any spraying or flammable liquids storage locations.
- Any such works should be removed to a ‘safe’ location or only be completed via ‘cold’ methods.

Important: Where this is not possible hot works **must** be considered the last resort and should be conducted in strict accordance with the Aviva Loss Prevention standard **Hot Work Operations** after the area has been purged of any flammable vapours and flammable material containers cleared a distance of at least 10 metres. The following actions must also be implemented:

- All other activities in the building associated with high hazard materials such as flammable liquids, combustible dusts, gases, etc. must be stopped for the duration of the hot work task and following fire watch.
- All areas of the air inlet system, the booth itself, the extraction and scrubbing system from inlet to exhaust, including filters must be cleaned off all combustible deposits.
- The filters associated with the ventilation system removed.
- The use of appropriate calibrated organic vapour detection devices used in all areas of the spray area and ventilation system, including any low-level sumps or tank areas.
- Fire watches undertaken for a minimum of 240 minutes after the hot works.
- Thermographic cameras, appropriately rated for use in environments where flammable vapours may be present, used throughout the process and fire watches.

Refer to Aviva Loss Prevention Standards **Hot Work Operations** and **Use of Thermographic Cameras - General Considerations** for further guidance.

Emergency Response

An emergency response plan should be produced specifically developed to outline key responsibilities and actions in an emergency event including paint spray breakdowns. The emergency response plan should include responses to all likely property and business interruption risks including fire, explosion, breakdown and escape of water and other fluid related exposures.

The emergency response rules should be formally documented, and appropriate training provided.

Refer Aviva Loss Prevention Standard **Emergency Response Teams** for further guidance.

Business Continuity

Every business should have a formal Business Continuity Plan in place. This should be reviewed to ensure disaster recovery and continuity arrangements remain adequate. Any actions generated should be addressed promptly.

Refer Aviva Loss Prevention Standard **Business Continuity** for further guidance.

Automatic Detection, Fire Suppression and Associated Interlocks

The following should be considered as part of the overall risk management strategy for paint spray activities:

- Automatic fire detection.
- Automatic organic vapour detection.
- Automatic fire suppression such as automatic sprinkler or deluge protection.
- Interlocks between the above and the operation of the paint spray activities, e.g., fire alarm activation or isolation (impairment) and the safe shut down of the paint spray activities.

In a fire scenario, the ventilation system should be interlocked to shut down immediately, upon fire alarm in the building.

Note: Consult your Property Insurer and Broker for further guidance relating to detection, protection and interlocks associated with paint spray activities.

Checklist

A generic **Paint Spray Operations Checklist** is presented in Appendix 1 which can be tailored to your own organisation.

Specialist Partner Solutions

Aviva Risk Management Solutions can offer access to a wide range of risk management products and services at preferential rates via our network of Specialist Partners.

For more information please visit: [Aviva Risk Management Solutions – Specialist Partners](#)

Sources and Useful Links

- [HSE - DSEAR in Detail](#)

Note: Whilst UK standards and legislation are referenced in this document, other international standards and legislation should be referenced where applicable.

Additional Information

Relevant Aviva Loss Prevention Standards include:

- **Housekeeping**
- **Self-Inspections**
- **Maintenance Regimes**
- **Use of Thermographic Cameras - General Considerations**
- **Emergency Response Teams**
- **Business Continuity**
- **Material Damage Risk Assessment**
- **Business Impact Analysis**
- **Managing Change**
- **Electrical Installations - Inspection and Testing**

To find out more, please visit [Aviva Risk Management Solutions](#) or speak to one of our advisors.

Email us at riskadvice@aviva.com or call 0345 366 6666.*

*The cost of calls to 03 prefixed numbers are charged at national call rates (charges may vary dependent on your network provider) and are usually included in inclusive minute plans from landlines and mobiles. For our joint protection telephone calls may be recorded and/or monitored.

Appendix 1 – Paint Spraying Operations Checklist

Location	
Date	
Completed by (name and signature)	

	Location, Construction and Compartmentation	Y/N	Comments
1.	Are paint spray operations located in a separate detached building?		
2.	If not, are they in a compartment with at least 90 minutes fire resistance?		
3.	Are windows/glazing fixed closed or sealed during spraying operations?		
4.	Are all doors to the spraying enclosure self-closing and kept closed during spraying?		
5.	Are doors interlocked to prevent spraying when open?		

	Filter Media, Ventilation and Extraction	Y/N	Comments
6.	Is an extraction system present to exhaust vapours and paint droplets?		
7.	Is the air intake fitted with filters to reduce contaminants?		
8.	Is the ventilation system rated for use in flammable atmospheres?		
9.	Are separate ventilation systems used for each spray area/booth?		
10.	Are manifolded ventilation systems avoided?		
11.	Is spraying interlocked to start only after 2 minutes of ventilation?		
12.	Does ventilation continue for 5 minutes after spraying ends?		
13.	Is there an emergency stop button interlocked with the ventilation system?		

	Filter Media, Ventilation and Extraction Cont'd	Y/N	Comments
14.	Is extraction ducting as direct as possible with minimal bends?		
15.	Does ducting have inspection and cleaning hatches along its route?		
16.	Does the discharge point avoid air intakes and ignition sources?		
17.	Are intake and exhaust fans/motors rated for flammable atmospheres?		
18.	Are exhaust motors located outside the ductwork?		
19.	Are removable filter linings replaced per OEM guidelines?		
20.	Are filter linings non-combustible or low flame spread rated?		
21.	Are clean filter linings stored away from the booth?		
22.	Are used filter linings treated as combustible waste?		
23.	Do air handling/ventilation fans include low flow/air failure alarms interlocked for safe isolation?		
24.	Are gas-powered air units risk assessed and interlocked for gas flow/flame failure?		
25.	Do air units use non-combustible filtration and monitor airflow?		
26.	Are wet filtration systems cleaned regularly?		

	Electrical	Y/N	Comments
27.	Are electrical systems maintained and inspected in accordance with national regulations, standards or codes?		
28.	Are electrical devices used in or near flammable areas appropriately rated?		
29.	Is this confirmed via risk assessment and electrical zoned drawings?		
30.	Are workers made aware of the risks from inappropriately classified electrical devices?		
31.	Are personal electrical devices prohibited in flammable areas?		

	Static	Y/N	Comments
32.	Has a risk assessment been conducted for static charge/discharge fire/explosion risks?		
33.	Are all booth elements, sprayed items, spray guns, and personnel appropriately earthed?		
34.	Are operatives in the general area provided with anti-static clothing and footwear?		
35.	Is resistance to earth of metal surfaces in the spray area below 1 ohm?		
36.	Are spray guns interlocked to prevent operation without earthing?		
37.	<ul style="list-style-type: none"> Are plastic items for flammable fluid transfer prohibited? Are only vessels capable of being earthed used for dispensing? 		
38.	Are plastic/rubber gasketed joints, flexible connections, and couplings earthed or avoided?		
39.	Are earthing connections visually checked and recorded regularly?		
40.	Are earthing connections tested annually?		
41.	Do personnel pass an earth test before entering the spray area?		
42.	Is earth test confirmed with wrist and footwear resistance test stations?		
43.	Is training on static risks provided to relevant workers?		

	Housekeeping Cont'd	Y/N	Comments
44.	Are spray and extraction areas kept clean and tidy with no storage of ordinary or waste materials?		
45.	Is the spray area used only for spraying and deemed suitable for flammable materials?		
46.	Are all waste materials removed immediately to non-combustible, self-closing lidded bins?		
47.	Is self-heating waste segregated in dedicated non-combustible, self-closing lidded bins?		

	Housekeeping	Y/N	Comments
48.	Is paint spray waste removed from buildings outside operational hours and stored at least 10 metres away?		
49.	Are waste receptacles clearly marked as containing flammable materials?		
50.	Are hazardous activities prohibited near waste stores?		
51.	<ul style="list-style-type: none"> Is extraction equipment subject to formal cleaning programmes? Is cleaning frequency determined via risk assessment considering operations, usage, material flammability, residue, and OEM recommendations? 		
52.	Is the roof of spray booths/rooms free from storage and materials?		
53.	Is the interior wall surface of the spray area smooth to assist cleaning and prevent overspray buildup?		
54.	Are spray deposit scrapings placed in closed metal receptacles, wetted down, and removed to external waste bins?		
55.	Are cleaning solvents stored outside the spray area in approved flammable liquids cabinets?		
56.	<ul style="list-style-type: none"> Are cleaning solvents used with mops, buckets, or stored in open top drums? If so, have these been removed? 		
57.	<ul style="list-style-type: none"> Are cleaning guns soaked in open top drums? If so, have these been removed? 		
58.	Are tools used in flammable atmosphere areas non-sparking?		
59.	Are hangers/hooks/conveyors cleaned weekly if items enter drying ovens?		
60.	<ul style="list-style-type: none"> Are non-combustible absorbent wipes used for spillages? Are these disposed of appropriately? 		
61.	Is absorbent material disposed in closed metal receptacles and removed externally?		

	Self-Inspection	Y/N	Comments
62.	Are regular self-inspections of spray areas conducted by responsible persons?		
63.	Are daily checks and weekly formal inspections performed?		
64.	Do inspections cover housekeeping issues like overspray, solvent use/storage, dust/residue, and ducting?		
65.	Is photographic evidence used during inspections?		
66.	Are regular self-inspections of spray areas conducted by responsible persons?		

	Maintenance	Y/N	Comments
67.	Is there a Planned Preventative Maintenance (PPM) programme in place for spray booths, ovens, and associated equipment?		
68.	Are spray booths and ventilation systems inspected per regulatory requirements (e.g., COSHH)?		
69.	Are filters replaced before recommended periods and disposed of appropriately?		
70.	Is oven equipment maintained by a competent person?		
71.	Is gas-fired oven equipment serviced by a Gas Safe registered person/company?		
72.	Are oven safety features (e.g., power interlocks) regularly tested and calibrated?		
73.	Is earthing continuity checked at least monthly?		

	Hot Work Operations	Y/N	Comments
74.	Are hot work activities prohibited in spray or flammable liquid storage areas?		
75.	Are hot works relocated to safe areas or completed via cold methods?		
76.	<ul style="list-style-type: none"> • If hot works must occur, are they done per Aviva Hot Work Operations standards? • Has the area been purged of any flammable vapours and flammable material containers cleared a distance of at least 10 metres? • Are all other activities in the building associated with high hazard materials such as flammable liquids, combustible dusts, gases etc., stopped for the duration of the hot work task and following fire watch? • Are all areas of the air inlet system, the booth itself, the extraction and scrubbing system from inlet to exhaust, including filters cleaned of all combustible deposits? • Are the filters associated with the ventilation system removed? • Has appropriate calibrated organic vapour detection devices been used in all areas of the spray area and ventilation system, including any low level sumps or tank areas? • Is a fire watch conducted for up to 240 minutes after hot works? Are thermographic cameras used during hot works?		

	Training	Y/N	Comments
77.	Are all individuals working with paint spray or associated maintenance or cleaning activities (including all contractors) formally trained on the hazards, risks and safety precautions associated with this high hazard activity? If so, is training: <ul style="list-style-type: none"> • Provided before any person is allowed to work with this high hazard operation? • Formally recorded? • Repeated at least annually and reinforced (with disciplinary procedures) when individuals are seen not following procedure? 		

	Automatic Detection, Fire Suppression and Associated Interlocks	Y/N	Comments
78.	Have the following been considered/provided: <ul style="list-style-type: none"> • Automatic fire detection? • Automatic organic vapour detection? • Automatic fire suppression such as automatic sprinkler or deluge protection? • Interlocks between the above and the operation of the paint spray activities e.g. fire alarm activation or isolation (impairment) and the safe shut down of the paint spray activities? 		
79.	In a fire scenario, the ventilation system should be interlocked to shut down immediately, upon fire alarm in the building?		

	Emergency Response	Y/N	Comments
80.	Is there a documented emergency response plan outlining responsibilities and actions?		
81.	Does the plan address fire, breakdown, water escape, and other fluid-related risks?		
82.	Is emergency response training provided to relevant personnel?		

	Business Continuity	Y/N	Comments
83.	Is there a formal Business Continuity Plan in place?		
84.	Is the plan reviewed regularly to ensure adequacy?		
85.	Are actions from the review addressed promptly?		
86.	Additional Comments:		

Please Note

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