

Working with Paints and Associated Chemicals

Document No. SMS-06-SW-1158	Work description		
	This Safe Work Instruction (SWI) describes the safe practices for working with the paints (including 2 pack paints) and associated chemicals that are used to maintain Rollingstock within Maintenance Centres.		
Scope	<p>This SWI applies to the hazards and precautions relevant to typical paints and their associated chemicals (thinners, hardeners, etc.) used within Rollingstock Division (RSD) Maintenance Centres</p> <p>Spray painting is not covered by this SWI.</p> <p>This SWI does not cover the hazards or safety measures for working at heights or the manual handling of materials and equipment.</p> <p>Whilst this SWI was developed in response to risk assessments, it does not eliminate the requirement to conduct risk assessments in accordance with SMS-06-GD-0198 Dangerous Goods and Hazardous Substances Risk Assessment to determine the need for additional controls.</p>		
Review date 16/05/13	References <ul style="list-style-type: none"> OHS Act 2000 OHS Regulation 2001, Part 4.3, Divisions 5 & 7, Chapter 6, Parts 6.1 to 6A.3 Subdivision 7 Australian Standard 4361-1998 Guide to Lead Paint Safety material Data Sheets (MSDS) SMS-06-GD-0199 Dangerous Goods and Hazardous Substances SMS-06-GD-0198 Dangerous Goods and Hazardous Substances Risk Assessment SMS-06-GD-0323 Personal Protective Equipment SMS-20-SR-0169 Health Management SMS-06-PR-0104 Workplace Risk Management. 		
Responsible supervisor Line Manager	Personal Protective Equipment (PPE) and precautions <ul style="list-style-type: none"> Half-facepiece respirator fitted with an organic vapour filter (A2) for working with 2 pack paint and other chemicals Full-face respirator fitted with an organic vapour filter (A2) for working with 333 Over Lacquer – SRA Blue. Long sleeved shirt and long pants/overalls Appropriate chemical resistant gloves Appropriate chemical resistant safety footwear Disposable overalls and disposable booties when removing lead based paint Additional Personal Protective Equipment (PPE) and other controls, as required by site risk assessments or Material Safety Data Sheet (MSDS) 	Competencies or qualifications <ul style="list-style-type: none"> Competent in the use of this Safe Work Instruction (SWI) Competent in the inspection and fitting of relevant Personal Protective Equipment (PPE) Rail Industry Safety Induction (RISI) Competent in Rollingstock Division (RSD) Customer Service Training 	Licences or permits required
IF CONTROL MEASURES ARE NOT SUITABLE AND MAJOR CHANGES ARE NEEDED, CONDUCT A RISK ASSESSMENT AND DEVELOP NEW CONTROLS ACCORDING TO SMS-06-PR-0104 Workplace Risk Management.			
	Note Pre work brief and task risk assessment Ensure a pre-work brief and task risk assessment is undertaken with all team members involved in the work activity. If any new/additional team members arrive any time later they must be briefed before they commence work.		
	Warning <i>Spray painting with 2 pack paints is prohibited in Rollingstock Division (RSD) Maintenance Centres due to the isocyanate exposure risk.</i>		

Working with Paints and Associated Chemicals

**Warning**

The following warning applies throughout this SWI:

- Some of the chemicals used by painters present a risk of short term (acute) and/or long term (chronic) illness. Ensure you are familiar with and work in accordance with this SWI as well as any controls identified in the relevant risk assessment. If you require more information, contact your Line Manager and/or refer to the relevant Material Safety Data Sheet (MSDS).
- Some paint previously applied to various Rollingstock Division (RSD) fleet types, may contain 1% or more lead and is therefore deemed to be 'lead based paint'. Lead based paint can be hazardous to the health of those who come in contact with dust, flakes or fumes. Therefore:
 - Report any flaking paint to your Line Manager as soon as practicable.
 - When removing lead paints ensure that the proposed work methods minimise the generation of dust, and wear the appropriate Personal Protective Equipment (PPE) for the task.
 - For additional controls reference should be made to Australian Standard 4361-1998 – Guide to Lead Paint.
 - Ensure ventilation is maintained throughout the task and Personal Protective Equipment (PPE) is worn.
 - Large scale lead based paint removal will require task specific work instructions and the implementation of risk based controls.
 - Information on paint currently being used can be found in the relevant Material Safety Data Sheet (MSDS) and site Dangerous Goods / Hazardous Substance risk assessments.
 - Additionally Rollingstock Division (RSD) has Hazardous Materials Registers for the fleet.
 - This register documents the locations where lead based paint has been identified on various Rollingstock Division (RSD) fleet types.
- The wearing of contact lenses when working with paints and chemicals is prohibited. Contact lenses absorb and concentrate vapours and chemicals which may lead to greater damage to your eyes in the event of an incident.

Site / job planning

Follow all worksite procedures, e.g. Induction, Pre-work brief:

- Prior to the commencement of painting ensure adequate safety signage and barricading has been put in place to warn others that painting is taking place.
- Clear the area of persons not required to carry out the painting task.
- Ensure the site has adequate ventilation during the work. In most instances this can be achieved through the use of the train air conditioning.
- Where deemed appropriate (e.g. on older trains) open the doors and windows within the relevant carriage and strategically place mechanical ventilation (e.g. mobile extraction fan). If unsure consult your Supervisor or Line Manager.
- Ensure you have controls for all site specific hazards and any specific controls required for all chemicals that you plan to use. Where possible use alternative chemicals that minimise potential hazards.
- Ensure you have the necessary Personal Protective Equipment (PPE) to carry out the task. Always take a spare set of respirator filters to the job site. Spare filters must be kept in their original packaging until they are fitted to the respirator.
- For any preparation work where dust maybe emitted and preparation chemicals are used, ensure that a safe work method is adopted and the appropriate Personal Protective Equipment (PPE) is worn.
- For general paint mixing ensure any mixing is carried out in a dedicated Painters Mixing Room before work commences. Use the extraction fan system fitted and wear your Personal Protective Equipment (PPE)
- When using **specific 2 pack paint kits** which are designed to be safely mixed in the work area, make sure that you assess your environment. Identify and report any hazards that maybe present. Ensure that you wear your Personal Protective Equipment (PPE) whilst undertaking any painting tasks.
- Check a suitable spill kit is available close by to contain any paint or chemical spills

Working with Paints and Associated Chemicals

Personal Protective Equipment (PPE)	<p>Chemicals used by painters can cause irritation, injury or illness if they come in contact with the skin or eyes, or are inhaled or swallowed. For this reason Personal Protective Equipment (PPE) is required for all painting tasks.</p> <p>Unless the task specific risk assessment or Material Safety Data Sheet (MSDS) requires additional or higher level Personal Protective Equipment (PPE), the following articles of Personal Protective Equipment (PPE) are mandatory for all painting tasks:</p> <ul style="list-style-type: none"> • Change respirator filters at 40 hour intervals or as per Material Safety Data Sheets (MSDS) recommendation. • Appropriate Respirators fitted with an organic vapour filters. • Half-face respirator fitted with an organic vapour filter (A2) for working with 2 pack paint, and other chemicals. • Full-face respirator fitted with an organic vapour filter (A2) for working with 333 Over Lacquer – SRA Blue. • Long sleeved shirt and long pants/overalls. • Appropriate chemical resistant gloves. • Appropriate chemical resistant safety footwear.
	<p>Note</p> <p><i>The effectiveness of respirators is reliant on an air tight fit on the wearer's face. Therefore always ensure that your respirator is correctly fitted throughout any paint and associated chemicals task.</i></p>
	<p>Warnings</p> <ul style="list-style-type: none"> • Failure to wear recommended Personal Protective Equipment (PPE) or to incorrectly fit Personal Protective Equipment (PPE) could result in serious injury or illness. Therefore always check that your Personal Protective Equipment (PPE) is correctly fitted before you interact with any paint or associated chemical. • Ensure respirator filters are changed after 40 hours of use and spare filters are kept in their original packaging until required for fitting. Failure to comply may result in serious injury or illness.
Pre-Start Checks	<ul style="list-style-type: none"> • When inspecting Personal Protective Equipment (PPE) refer to: SMS-06-GD-0323 Personal Protective Equipment and or manufacturer's instructions. • Ensure that the Personal Protective Equipment (PPE) that you are using is in good working order, will provide necessary protection and does not introduce any additional hazards. • Check for any damage to the filter, exhalation valve, straps and nose clip • Always check your respirator filters are the correct type for the painting task and the filters are in good working order. • Chemicals classified as dangerous or hazardous must be approved for use and comply with the guide lines set out in: SMS-06-GD-0199 Dangerous Goods and Hazardous Substances • Verify that the correct chemicals are available, are in clearly labelled containers and are within any expiry date which should be displayed on the container.
	<p>Warnings</p> <ul style="list-style-type: none"> • The use of the wrong chemicals or the incorrect use of the right chemicals could result in serious injury or illness. • Verify what chemicals you are using and make yourself familiar with the relevant risk assessment and Material Safety Data Sheets (MSDS) before use.

Working with Paints and Associated Chemicals

Safe Use of Chemicals	<ul style="list-style-type: none"> Only use chemicals in accordance with the manufacturer's instructions, including the Material Safety Data Sheets (MSDS). Only use brushes or rollers to apply chemicals. Note spray application is prohibited. Keep all lids of containers secured to minimise release of vapours. Ensure worksite has adequate ventilation and ventilation is maintained throughout the duration of the task. Do not smoke in or around a work area where flammable chemicals are being used and remove any other sources of ignition. Dispose of all waste (chemicals, paint and materials) in accordance with the relevant Material Safety Data Sheet (MSDS) and RailCorp's Environmental Management requirements. "Personal hygiene". After using any chemical, always wash your hands, particularly before <u>eating, drinking or smoking</u>.
Mixing Paints	<ul style="list-style-type: none"> Ensure you are familiar with the Material Safety Data Sheets (MSDS) and Technical Data Sheet. When mixing paints and hardeners always follow the manufacturers instructions and mixing ratios where applicable. Always use the mixing kits when provided by the manufacturer, otherwise use a suitable mixing container that is clean and free of other chemicals. Ensure all required Personal Protective Equipment (PPE) is fitted and worn correctly as you may be more exposed to vapours and splashes when performing this task.
	<p>Warnings</p> <ul style="list-style-type: none"> <i>The spraying of paints and chemicals can dramatically increase the risk of injury, illness, fire or explosion and is not permitted in Rollingstock Division (RSD) Maintenance Centres.</i> <i>Failure to maintain adequate ventilation could increase the risk of illness, fire or explosion.</i> <i>Flammable vapours can accumulate in work areas. Smoking or the use of other sources of ignition could result in fire or explosion and are strictly prohibited.</i> <i>Failure to adequately wash your hands after chemical use could result in the transfer of poisons to your mouth or eyes.</i>
First Aid	<p>First Aid requirements for each chemical will vary. Users must make themselves familiar with the particular Material Safety Data Sheets (MSDS) and always seek immediate medical assistance. However the following is generic information that may be of use whenever first aid is required for the treatment of chemical exposure:</p> <ul style="list-style-type: none"> If swallowed, rinse mouth with water. Do not induce vomiting, as inhaling vapours or aspirating vomit can cause damage to the lungs or death by asphyxiation. In the event of skin exposure to chemicals, remove any contaminated clothing and wash skin or hair with running water-unless directed otherwise by a medical professional or the Poison Information Centre. Refer to Material Safety Data Sheets (MSDS) for this information. In the event of eye exposure to chemicals, rinse with copious amounts of running water, holding eye lids open, unless directed otherwise by a medical professional or the Poison Information Centre. Refer to Material Safety Data Sheets (MSDS) for this information. In the event of inhalation, remove the affected person from the area, remove any contaminated clothing and keep patient in a comfortable environment. <p>Furthermore:</p> <ul style="list-style-type: none"> Never leave an affected person alone as they may lapse into unconsciousness, stop breathing and die if no one is available to seek medical assistance. Provide Material Safety Data Sheets (MSDS) information to the Emergency Services on their arrival.

Working with Paints and Associated Chemicals

Fire Fighting	When using fire extinguishers assess the area prior to using the extinguisher. Be alert when in confined areas as pressurised extinguisher gases or powders can reflect back and affect your breathing or eyesight.
Storage of Paints and Chemicals	To prevent paint and chemical incidents observe the following precautions: <ul style="list-style-type: none">• Store paints and chemicals in an approved and segregated area.• Paints and associated chemicals must be kept free of water and certain other chemicals as inadvertent mixing in storage may result in hazardous reactions.• The storage area must be kept free of all ignition sources.• Ensure spill containment precautions are adequate and comply with statutory requirements.• Oxidising chemicals must always be segregated from other chemicals as they provide oxygen which greatly accelerates fires.
Clean-up	<ul style="list-style-type: none">• Ensure equipment and containers are removed from work area.• Remove all previously erected safety signage and barricading.• Dispose of chemicals, rags used containers and disposable overalls and disposable booties, in approved waste disposal bins and in accordance with Material Safety Data Sheets (MSDS) and RailCorp's Environmental Management requirements.• Notify of completion, as required.
	Warnings Ensure you dispose of waste in the correct disposal containers. Be alert "the mixing" of certain chemicals may result in spontaneous combustion - fire or explosion.
Additional controls	<i>Additional controls are required for large scale lead based paint removal.</i>