

Sweepers – Safe Operation

Review date: 23/12/10

Document no. SMS-06-SW-1163	Work description This SWI describes the safe work practices for the safe operation of a ride-on floor sweeper
	Scope This SWI applies to ride-on floor sweepers in RSD
Review date 23/12/10	References <ul style="list-style-type: none"> • NSW OHS Act 2000 • NSW OHS Regulations 2001 Chapter 5 • AS 2359 Series : Powered industrial trucks • AS4332:2004 The storage and handling of gases in cylinders • AS/NZS 2906:2001 Fuel Containers-portable-plastic and metal • Manufacturers Operators Manual • SMS-06-GD-0225 Plant • SMS-06-GD-0403 Plant Risk Assessment • SMS-06-GD-0001 Guide to Manual Handling • SMS-06-PR-0173 Plant and Equipment Lock-out Tag-out • SMS-06-GD-0323 Personal Protective Equipment • SMS-05-SR-0027 Records management • SMS-16-FM-0716 Mobile Plant Pre-start-Daily Checklist • SMS-16-FM-0715 Mobile Plant Periodic inspection • SMS-06-SW-0405 Handling Sharps • SMS-06-SW-0195 Safe Handling and Storage of Flammable and Combustible Liquids
Responsible supervisor Line Manager	PPE and precautions <ul style="list-style-type: none"> • High visibility vest or clothing • Safety Footwear • Safety Eyewear • Protective Gloves, as required • Dust mask, as required • Hearing protection, as required Competencies or qualifications <ul style="list-style-type: none"> • Rail Industry Safety Induction (RISI) • Site specific induction • Competent in the use of the specific sweeper-on site training • Familiar with manufacturer's operating instructions • Traffic management plan briefing Licences or permits required
Tools and equipment 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 .	
	<p>Warning</p> <ul style="list-style-type: none"> • The use of a ride-on sweeper is to be carried out in accordance with the relevant site traffic management plan. Failure to do so could result in injury to personnel • Always operate sweepers in accordance with the manufacturer's operating instructions. Failure to operate accordingly could result in injury • Never carry passengers on a sweeper. Always wear provided seatbelts when operating mobile plant. Failure to comply could result in serious injury in the event of an incident. Where seatbelts are not fitted, the plant risk assessment should consider whether they are to be retro-fitted • Sweepers can disturb dust that can become airborne. To prevent injury always wear eye protection and Dust mask, as required • Gas, diesel and petrol powered sweepers emit carbon monoxide during their operation. Operating in poorly ventilated/confined spaces could lead to serious injury or death to the driver and others • If sweeper is damaged, malfunctioning or otherwise not safe to use, tag it with an "Out-of-Service" tag, in accordance with SMS-06-PR-0173 Plant and Equipment Lock-out Tag-out, and notify your Line Manager as soon as practicable. Using an unsafe sweeper could cause injury to operator and/or others

Sweepers – Safe Operation

General	Staff are to be trained and supervised so they; <ul style="list-style-type: none"> • Undertake pre-start checks before operation • Only operate the sweeper on a suitable and flat surface • Travel in accordance with the local traffic management plan • Park the vehicle in the appropriate location at the end of use
Pre-start check	Carry out a pre-start check using <u>SMS-16-FM-0716 Mobile Plan Pre-start Daily Checklist</u> , at least once per shift, or before each use if used less than once per shift. The record of this inspection is to be provided to line management and retained in accordance with <u>SMS-05-SR-0027 Records management</u> Ensure all warning devices such as warning beacons and reversing beepers are functioning correctly Check the sweeper is fully charged/refuelled before use
	Warning <ul style="list-style-type: none"> • Never smoke whilst checking battery fluid levels as the flammable gases produced in the battery may ignite causing serious injury • Refuel away from work area in a well-ventilated place. Do not smoke when refuelling. Keep away ignition sources (including cigarettes) and people not involved.
Operate Sweeper Safely	Where provided, seatbelts must be worn Before moving off, check for other vehicles, train movements and pedestrians Use your horn to warn potential pedestrian's of your approach, such as when travelling around corners, entering pedestrian thoroughfares or approaching doorways Always turn away from track edge and be alert to train movements at all times Never enter a restricted or pedestrian only area without first seeking permission from line management
	Warning <ul style="list-style-type: none"> • Ride-on sweepers may roll if used on unstable or inclined surfaces. Always operate in accordance with the manufacturer's instructions and wear provided seatbelts at all times. • If permission is granted to enter a restricted or pedestrian area, to prevent injury use an observer, travel at slower speeds, and use the horn to signal approach as required
After Use Clean	Clean the equipment after use, wearing protective gloves Clean up any waste spilt whilst cleaning equipment Dispose of waste correctly at the designated waste areas Notify Supervisor of completion, as required Return sweeper to the designated parking area
	Warning <ul style="list-style-type: none"> • Bins and bags containing waste may contain biological or sharps hazards. Never place unprotected hands in bins or bags containing waste and only deal with sharps in accordance with <u>SMS-06-SW-0405 Handling Sharps</u>
Inspect the Charger	Before charging the battery inspect the battery charger and charging cables to ensure they are free from wear and damage before use. Check the service tag is in date. Ensure the charger has no out of service tags attached.
Charge the Batteries	After each use re-charge the batteries as follows:- <ul style="list-style-type: none"> • Ensure the charger has its own power source and access to the power switch is unhindered • Ensure the battery is secure and without any metal objects or parts close to or likely to fall onto it • Ensure charger is switched off before connecting charging cable to sweeper • Charge battery as per manufacturers instructions • When charging is complete, switch off charger before disconnecting cable from sweeper • Store battery charger cable correctly to prevent damage to it
	Warning <ul style="list-style-type: none"> • Always charge batteries in accordance with manufacturers instructions, in a well ventilated and designated No Smoking area to prevent injuries from possible ignition of the battery gases • Charging cables can carry a heavy current. Ensure the power on the charger is isolated before connecting cables to battery. Failure to adhere to this requirement could result in electric shock or arcing • Never use or store equipment that is damaged. If you find or cause damage, place an "Out-of-Service" tag in accordance with <u>SMS-06-PR-0173 Plant and Equipment Lock-out Tag-out</u> on the equipment and notify your Line Manager as soon as practicable

Sweepers – Safe Operation

Changing a Gas Cylinders on LPG Models	<p>LPG bottles are only to be changed in an approved well ventilated areas that are free of ignition sources and only by persons approved and competent to do so</p> <p>Always change LPG bottles in accordance with the sweeper manufacturer's instructions. Below are generic steps for changing LPG cylinders:</p> <ul style="list-style-type: none"> • Ensure you are wearing safety eyewear and protective gloves as escaping LPG can cause cold burns • Check the bottle you are going to fit is within its NATA 10 year test date and is in good condition • Turn off the cylinder valve fully and allow the engine to stop then switch off the engine • Carefully disconnect the cylinder hose and the retaining straps • Remove the depleted cylinder and store correctly • Install the replacement cylinder correctly securing the retaining straps • Reconnect the cylinder hose securely then open the valve $\frac{1}{4}$ turn to allow the hose to pressurise • Check for leaks before fully opening the valve, if a leak is found shut the cylinder valve and tag it with an "Out-of-Service" tag, in accordance with SMS-06-PR-0173 Plant and Equipment Lock-out Tag-out, and notify your Line Manager as soon as practicable
	<p>Warning</p> <ul style="list-style-type: none"> • <i>This step requires considerable manual handling. When changing cylinders always use assistance, Use a firm grip, keep back straight, bend knees and avoid twisting, bending or overreaching. Work in accordance with manual handling training.</i> • <i>Failure to ensure all sources of ignition are clear could result in serious injury or death from fire or explosion</i>
Refuelling Petrol/Diesel Models	<p>Observe the following additional cautions when refuelling these models :</p> <ul style="list-style-type: none"> • Turn off the engine before adding fuel to the engine fuel tank • Ensure good ventilation is maintained when refuelling is being carried out • NEVER start the engine if there is fuel spilt on it or if there is a leak in the fuel system • If there is fuel on your clothes, change them before starting the sweeper • Only use the correct fuel for the sweeper - it should be kept in an approved fuel container (AS/NZS 2906:2001) and stored in an open area away from possible sources of flames or sparks in accordance with SMS-06-SW-0195 Safe Handling and Storage of Flammable and Combustible Liquids
	<p>Warning</p> <ul style="list-style-type: none"> • <i>Smoking while refuelling is strictly prohibited</i> • <i>Refuel away from work area in a well-ventilated place. Do not smoke when refuelling. Keep away ignition sources (including cigarettes) and people not involved.</i>
Periodic Inspection and Maintenance	<p>Sweepers are to be periodically inspected using SMS-16-FM-0715 Mobile Plant Periodic Inspection in accordance with the Plant & Equipment inspection schedule</p> <p>Sweepers are to be serviced and maintained in accordance with the manufacturers recommendations and the Plant & Equipment inspection schedule</p> <p>Inspection, service and maintenance records are to be provided to line management and retained in accordance with SMS-05-SR-0027 Records management</p> <p>Manufacturer's operating and maintenance manuals are to be made available to all users</p>
Additional controls	
<ul style="list-style-type: none"> • <i>Additional controls may be required, depending on site specific conditions. Always refer to relevant SWIs and seek advice from the relevant Line Manager, if required</i> • <i>If you identify additional hazards and / or controls relevant to this SWI, notify your Safety Facilitator or Line Manager as soon as practicable, so they can be noted and used to continuously improve this document</i> 	