

Tree trimming/arboricultural industry

Hazardous substances risk assessment

Only required for chemicals that are listed as Hazardous Substances

The chemical's label and Material Safety Data Sheet (MSDS) will be needed to complete the risk assessment.
References: Workplace Health and Safety Regulation Part 13; the Hazardous Substances Code of Practice 2003

Name of substance: **Petrol**

How is the substance used? - i.e. describe the process? (If the chemical is used for a number of different processes a risk assessment may be needed for each task. Also consider decanting, storage & disposal)	Filling petrol chain saws from the back of a ute.	
How are people exposed to the substance? (tick or mark applicable routes or entry)	Skin <input checked="" type="checkbox"/> Eyes <input checked="" type="checkbox"/> Inhalation <input checked="" type="checkbox"/> Ingestion <input checked="" type="checkbox"/>	
How much of the substance are workers exposed to during the task? (e.g. in litres / millilitres)	4 litres	
For how long are workers exposed to the substance? (How often is the chemical used. e.g. in hours per day and days per week)	10 minutes, 2 times per day.	
Briefly, what are the health effects of exposure to this substance? (Refer to the MSDS)	Skin:	Discomfort, dermatitis
	Eyes:	Inflammation, ulceration, vision impairment
	Inhalation:	Lung irritation, nausea fatal
	Ingestion:	
What engineering control measures (e.g.: extraction ventilation; dilution ventilation) are recommended by the MSDS and/or label?	Use in well ventilated areas	
Currently, what engineering controls are used to control exposure to the substance?	Used in the open at the tree felling location (generally residential areas or open forest).	
If engineering controls are used, are they maintained and checked for effectiveness? (Give details)	Not applicable	
What personal protective equipment (PPE) is recommended by the MSDS and/or label?	Skin:	Polyethylene or PVC gloves
	Eyes:	Safety glasses/goggles
	Inhalation:	Respirator
Currently, what PPE is used? (Give details)	Skin:	None
	Eyes:	None
	Inhalation:	None
Are any other control measures (e.g. procedures, rotation of people, using substance after hours to minimise how many people are exposed, etc....) recommended by the MSDS and/or label?	No.	
Are any other control measures <u>currently</u> used at the workplace?	No.	



<p>What is the level of risk from use of this hazardous substance (select one)?</p>	<p><input checked="" type="checkbox"/> Risks not significant now and not likely to increase in the future</p> <p><input type="checkbox"/> Risks are significant but effectively controlled (but could increase in the future)</p> <p><input type="checkbox"/> Risks are significant and not effectively controlled</p> <p><input type="checkbox"/> Uncertain about the risks (<i>conduct air monitoring and/or health surveillance [see below] or obtain further information and advice</i>)</p>																
<p>Explanation of why this risk level is chosen:</p>	<p>Ventilation is good and workers use small quantities infrequently. However no instructions given to workers about precautions around this highly flammable liquid.</p>																
<p>Does air monitoring need to be done? <i>You can have air monitoring done to:</i></p> <ul style="list-style-type: none"> • <i>find out how much your employees are being exposed to</i> • <i>find out if the controls being used are adequate to ensure employees health and safety is protected</i> 	<p>No.</p>																
<p>What control measures will be implemented? (<i>The best type of control is by elimination; however other types of controls can be used.</i>)</p> <p>Hierarchy of control measures</p> <p style="text-align: right;">(Most effective)</p> <ul style="list-style-type: none"> • elimination • substitution (with a less hazardous substance) • engineer out the hazard by isolation • engineer out the hazard by ventilation • administrative controls • PPE (especially respiratory protection) <p style="text-align: right;">(Least effective)</p>	<p>Give details (if any): Administrative controls:</p> <ul style="list-style-type: none"> • minimise the quantity of petrol kept in the ute • remove ignition sources from workers (e.g. lighters) – to be kept in the cabin of the ute before and after smoko breaks • petrol containers to be secured in back of ute • provide extinguisher (foam, dry chemical powder or carbon dioxide) • train workers about the dangers of working with petrol 																
<p>Is health surveillance required? Health surveillance is required if:</p> <ul style="list-style-type: none"> • someone has an adverse effect from a hazardous substance at work; or • the level of risk is significant and the substance contains (or is) one or more of the following: <table border="1" data-bbox="121 1406 778 1704"> <tr> <td>4,4' Methylenebis (2-chloroaniline) (MOCA)</td> <td>Inorganic chromium</td> </tr> <tr> <td>Acrylonitrile</td> <td>Isocyanates</td> </tr> <tr> <td>Asbestos</td> <td>Organophosphate pesticides</td> </tr> <tr> <td>Benzene</td> <td>Pentachlorophenol (PCP)</td> </tr> <tr> <td>Cadmium</td> <td>Polycyclic aromatic hydrocarbons (PAH)</td> </tr> <tr> <td>Creosote</td> <td>Thallium</td> </tr> <tr> <td>Crystalline silica</td> <td>Vinyl chloride</td> </tr> <tr> <td>Inorganic arsenic</td> <td></td> </tr> </table> <p>(Refer to s 109 of the Queensland <i>Workplace Health and Safety Regulation 1997</i>)</p>	4,4' Methylenebis (2-chloroaniline) (MOCA)	Inorganic chromium	Acrylonitrile	Isocyanates	Asbestos	Organophosphate pesticides	Benzene	Pentachlorophenol (PCP)	Cadmium	Polycyclic aromatic hydrocarbons (PAH)	Creosote	Thallium	Crystalline silica	Vinyl chloride	Inorganic arsenic		<p>Petrol contains benzene. Minimal quantities used in the outdoors, so does not pose a significant risk.</p>
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Date: 10 June 2006.

Review Date: 10 December 2006 (to check the summer conditions)

Person/s conducting risk assessment: Joe Bloggs – Owner