

Australian Refrigeration Council Ltd

Guide to producing a Risk Management Plan

Identifying risks to prevent refrigerant emission

A condition of authorisation

DEVELOPING A RISK MANAGEMENT PLAN

Why do I need a Risk Management Plan?

Under the Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995, a condition of holding a Refrigerant Trading Authorisation (RTA) is implementing an effective risk management plan (RMP), which outlines the handling and storage of refrigerant in the holder's business.

What should my RMP include?

A RMP must identify potential risks which could result in the emission of refrigerant to the atmosphere and will put measures into place to minimise the possibility of those risks occurring.

Your RMP must reflect risks and measures relevant to what occurs with your refrigerant both on and off the job. This applies whether your business is conducted from a vehicle or building and whether you are a sole trader or employ 100 technicians.

Note:

At audit, the ARC Field Officer will ask questions related to the risks you have identified for your business and determine whether you have put an effective RMP into place. The Field Officer will also discuss possible risks you may not have considered.

A sample RMP covering the broadest risk assessment is in this document and available on our website www.arctick.org. This is simply a guide – only the risks that are valid for your business should be included in your RMP. There are also many risks not shown in this sample that could be relevant to your business and therefore should be included.

The format and medium of the RMP is at the trading authority holder's discretion, but must contain sufficient information and detail to satisfy the ARC Field Officer.

The aim of this process is to ensure all risks are identified and the appropriate measures are put in place to minimise refrigerant emissions.

SAMPLE RISK MANAGEMENT PLAN

The following steps may assist in developing your RMP:

Step 1

What are the main activities you would undertake on a daily, weekly, monthly or yearly basis with regards to handling and storing refrigerant?

Examples could include, but are not limited to: purchasing refrigerant, transporting refrigerant, using equipment containing refrigerant, installing, servicing and maintaining equipment containing refrigerant or that will contain refrigerant, recovering or recycling refrigerant and storing or disposing of refrigerant.

Step 2

What are the potential risks of refrigerant escaping associated with the main activities identified in Step 1?

Under each main activity describe any potential risk where refrigerant could be emitted into the atmosphere. Simple examples might be: as a result of loose or damaged cylinder caps, cylinders not being secured in a vehicle and work practices not complying with the industry Code of Practice.

Step 3

What can you do to reduce the potential risks you identified against each of the main activities in Step 2?

Develop common sense solutions or make reference to specific Australian Standards that say what action needs to be taken against all the potential risks you've identified where refrigerant may escape. These solutions are called "control measures".

Step 4

The RMP must identify the people responsible for ensuring the plan is implemented and confirm the RMP process is being followed.

Identify the person(s) responsible for putting the RMP in place and maintaining each aspect. This could be the foreman, the service manager, the office manager, or yourself.

Step 5

The RMP must show an intended review date for the RMP.

Identify when the RMP will be reviewed – it must be reviewed at least annually (every 12 months) to ensure activities, control measures and ratings are still valid, including updating those responsible for the RMP and those using it.

*The Australian and New Zealand Refrigerant Handling Code of Practice 2007

**The Australian Automotive code of Practice 2008

Activity	Potential Hazards/Risks	Australian Standards and Code of Practice Reference	Risk Control measures	Responsible person	Review Date
Purchasing Refrigerant	Loose or damaged Cylinder caps.	AS 2030.1 AS 4332 *COP Com **COP Auto	On receipt check cylinders are tightly capped with sealing caps. Run leak detector around the valve area under the wrapping to check for leaks. Record weight.	John Smith	1 July 2010
	Poor cylinder condition.	AS 2030.1 AS 4332 *COP Com **COP Auto	Check all cylinders to ensure they are within test date. Do a visual inspection checking cylinder condition.	Peter Brown	1 July 2010
Transporting refrigerant	Cylinder damaged during transportation	AS 2030.1 AS 4332	Ensure cylinders are kept secure so they can't move around the vehicle by (Detail method). Ensure cylinders are kept away from heat sources, including the sun, by (Detail method). Ensure all cylinders are stored vertically and cylinder valves are not overhanging the vehicle.	Peter Brown	1 July 2010

	Damage to cylinder during handling (hand moved or machine moved).	AS 2030.1 AS 4332	<p>All large cylinders are to be moved using suitable lifting or transport equipment to minimize manual handling risks.(Detail)</p> <p>Where suitable equipment is not practical cylinders are to be manually lifted or carried. The smallest sized cylinders suitable for the job must be used.</p> <p>Cylinders are not to be rolled along the ground in a horizontal position, as this can open or damage the cylinder valve.</p>	John Smith	1 July 2010
Using equipment containing refrigerant	Leaking of refrigerant during charging of equipment.	AS 2030.1 AS 4332	<p>Visually check all fittings hoses for damage.</p> <p>Leak test fittings and hoses prior to opening isolation valves at the ends of each hose.</p> <p>Follow the equipment manufacturers instructions for evacuation and charging of a system, unless the instructions specify an action that would lead to refrigerant escaping from the system or contradicts Australian standards and regulations.</p>	Peter Brown	1 July 2010
Decommissioning end of life equipment	Leakage of refrigerant if pumped down and left in the equipment.	*COP Com **COP Auto	<p>(RAC) All refrigerant is to be reclaimed from all parts of the system at the time of decommissioning.</p> <p>(Automotive) When a vehicle is being scrapped or dismantled or the air-conditioning system is being de commissioned all refrigerant is to be recovered from the system.</p> <p>After recovery refrigerant is to be recycled or returned to an authorized refrigerant supplier.</p>	John Smith	1 July 2010

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<p>Storing refrigerant</p>	<p>Leakage due to inappropriate storage</p>	<p>AS 4041-2004 *COP Com **COP Auto</p>	<p>Refrigerant is to be stored in a secured cage in a cool area away from sources of direct heating and the risk of fire with appropriate signage to provide ready identification for emergency teams.</p> <p>The refrigerant cylinders must have a sealing cap in place.</p>	<p>John Smith</p>	<p>1 July 2010</p>
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