



**A step by step guide for
managing chemicals
in the workplace**

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This publication is based on the following source material:

Occupational Health and Safety (Hazardous Substances) Regulations 1999 (Vic)

Code of Practice for Hazardous Substances, No. 24, 1 June 2000 (Vic)

Dangerous Goods (Storage and Handling) Regulations 2000 (Vic)

Code of Practice for the Storage and Handling of Dangerous Goods, No. 27, 8 December 2000 (Vic)

Managing chemical hazards in the workplace: Advice for managers and supervisors, April 1996, WorkCover NSW

Introduction

The purpose of this guide is to help employers to manage chemicals safely, and in doing so to comply with the relevant aspects of the Victorian *Occupational Health and Safety (Hazardous Substances) Regulations 1999* and the *Dangerous Goods (Storage and Handling) Regulations 2000*. Dangerous goods that are considered explosives are covered by separate regulations. Specific requirements that apply to explosives are not covered in this booklet.

The combined aim of the Occupational Health and Safety (Hazardous Substances) Regulations and the Dangerous Goods (Storage and Handling) Regulations is to protect people and property from risks associated with the use and storage of chemicals. To achieve this, the regulations impose duties on manufacturers, importers, suppliers and employers dealing with hazardous substances and dangerous goods. A summary of the duties is outlined in this guide. Approved codes of practice for both regulations are also available to help various parties to understand the regulatory requirements and comply with them. **As this document is only intended as a guide, reference should be made to the regulations themselves if there is uncertainty about particular legal requirements.**

This booklet suggests ways in which you can manage the hazards and risks posed by the use of chemicals classified as hazardous and/or dangerous goods. Many substances are classified as both hazardous substances and dangerous goods. In these cases, both regulations apply and should be considered at the same time. Employers who manufacture, import and supply chemicals to workplaces should also refer to the booklet titled *A step by step guide for manufacturers, importers and suppliers of hazardous substances and dangerous goods* produced by WorkSafe Victoria.

Managing chemicals safely requires consultation, commitment and resources in the form of funds, people and time. To undertake the tasks outlined in this booklet and to achieve a safe workplace in relation to chemicals, you will need to provide adequate resources, and involve employees and health and safety representatives throughout the process.

How to use this guide

This guide provides a step by step approach to managing chemicals safely with a number of easy to follow instructions. Key tasks associated with each step are shown on the left side of the page. A more detailed explanation of the task and suggestions on how to go about it are shown in the shaded area on the right side of the page. Depending on your level of knowledge, you can either follow the prompts on the left, or use the additional guidance provided in the shaded areas. Sample forms, checklists and details of where to go for further information are provided in the appendices.

What is a hazardous substance?

Hazardous substances are chemicals that can harm your health. They may be solids, liquids or gases, pure substances or mixtures. For the purposes of the regulations, they are defined as those that:

- are on the *List of Designated Hazardous Substances**; or
- meet the *Approved Criteria for Classifying Hazardous Substances*. *

*Produced by the National Occupational Health and Safety Commission.

What are dangerous goods?

Dangerous goods are substances and articles (e.g. matches, car batteries) classified on the basis of immediate physical or chemical effects such as fire, explosion, corrosion, oxidation, spontaneous combustion and poisoning that can harm property, the environment or people. They may be solids, liquids, pure substances or mixtures. Dangerous goods are defined in the *Dangerous Goods Act 1985* and listed in the *Australian Code for the Transport of Dangerous Goods by Road and Rail* (ADG Code).

Many chemicals are classified as both hazardous substances and dangerous goods.

What are the key duties of manufacturers, importers and suppliers?

The *Occupational Health and Safety (Hazardous Substances) Regulations 1999* and the *Dangerous Goods (Storage and Handling) Regulations 2000* require manufacturers and importers (first suppliers) to:

- determine if substances supplied are hazardous and/or dangerous goods
- prepare material safety data sheets (MSDSs) and labels for substances classified as hazardous and/or dangerous goods
- prepare package markings and packaging for substances classified as dangerous goods
- ensure that the condition of dangerous goods is in accordance with the *Commonwealth Road Transport Reform (Dangerous Goods) Regulations 1997* before they are supplied to any person
- review and revise MSDSs as required and in any event every five years
- provide a current MSDS to any person to whom the substance is supplied and to any employer on request
- disclose commercially confidential information to a registered medical practitioner on request.

Suppliers (excluding retailers or retail warehouse operators) are required to:

- provide a current MSDS to any person to whom hazardous substances or dangerous goods are supplied for use at a workplace and to any employer on request
- ensure containers in which substances are supplied are labelled/marked with the manufacturer's or importer's label
- ensure containers of dangerous goods do not, or will not, leak and that the dangerous goods are in good condition.

What are the key duties of employers?

The *Occupational Health and Safety (Hazardous Substances) Regulations 1999* and the *Dangerous Goods (Storage and Handling) Regulations 2000* require employers (occupiers) to:

- ensure that prohibited hazardous substances are not used
- obtain a copy of the current manufacturer's or importer's MSDS for all hazardous substances/dangerous goods supplied to the workplace and ensure that workers have access to them
- ensure all containers of hazardous substances/dangerous goods supplied are labelled/ marked with the manufacturer's or importer's label
- ensure decanted or transferred hazardous substances/dangerous goods are labelled as required
- ensure hazardous substances/dangerous goods in systems/pipework are identified
- set up a hazardous substances/dangerous goods register
- assess risks to health if hazardous substances are used
- identify hazards and assess risks to people and property if dangerous goods are stored or handled
- record the risk assessment result
- eliminate or reduce risks associated with the use of hazardous substances/dangerous goods as far as is practicable
- for dangerous goods, undertake specific risk control duties associated with: design; workers and visitors; stability and interaction of goods; plant and structures; spill control; and dangerous atmospheres. Prepare for incidents and emergencies and undertake specific duties in relation to incidents. Ensure storage and processing areas are placarded where required
- for hazardous substances, carry out atmospheric monitoring and health surveillance in certain circumstances
- provide employees with information, instruction, training and supervision
- consult with health and safety representatives under certain circumstances
- undertake additional duties if scheduled carcinogens or threshold quantities of dangerous goods are stored or used.

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12 Steps to managing chemicals

PLANNING PHASE

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HAZARD IDENTIFICATION PHASE

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RISK ASSESSMENT PHASE

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RISK CONTROL PHASE

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STEP 12:	Document and check the way you do things	(p24)
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PLANNING PHASE

Step 1: Decide who is responsible for key tasks and plan action

A person or group of people must be given responsibility for managing chemicals and ensuring all legal requirements are met. Tasks must be planned to make the process manageable and effective.

□ Appoint a person or team to oversee or coordinate the use and/or storage of chemicals

Decide who is going to oversee what needs to be done.

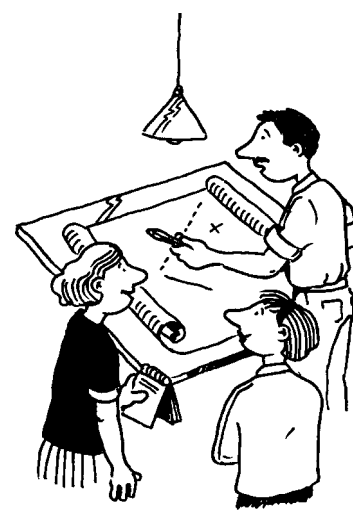
The person or team should have the authority to allocate resources, roles and responsibilities, and to consult relevant employees so that the best person/s are selected for the job. They should ensure that the person/s selected are committed to the task.

The coordinator or team needs to consult with, and involve, key persons such as supervisors, health and safety representatives, and purchasing officers so that they can contribute to managing the use or storage of chemicals in the workplace.

□ Set up a plan that outlines what needs to be done, by whom and when

The plan should outline who does what tasks and when. Other tasks may be required but at minimum decide (and record if desired) who will:

- establish a consultation process – when, how, with whom, on what
- provide information/instruction and training
- identify substances being used and stored
- review material safety data sheets (MSDSs) and labels to check which substances are hazardous or dangerous goods
- establish and maintain a hazardous substances/dangerous goods register
- check if MSDSs are accessible to relevant persons/groups
- ensure containers, packages, and systems such as pipes are adequately labelled/marked or identified
- assess risks to people, property and the environment
- put safety measures in place (including specific measures for dangerous goods) where required
- supervise or conduct further testing if required (e.g. atmospheric monitoring and/or health surveillance)
- determine if scheduled carcinogens (cancer causing substances) and threshold levels of dangerous goods are used on site
- apply for licences or notify WorkSafe Victoria if required
- document activities where required
- engage consultants where necessary.



□ Where necessary, provide training to persons given roles and responsibilities

If staff do not have the knowledge or skills to undertake the tasks listed above, training will need to be provided either internally or externally. A flexible training resource kit titled *Hazardous Substances in the workplace* is available from WorkSafe Victoria to assist this process.

Also refer to the WorkSafe Victoria publication *Getting Started with Workplace Health and Safety: An introduction to Health and Safety Responsibilities, Roles and Functions, Training, Information and Records* for further guidance.

Inquire about suitable external training where required. Refer to Appendix 5 for information sources/contacts.

□ Engage consultants where necessary

Use consultants in areas where you do not have in-house expertise to carry out particular tasks.

Refer to the WorkSafe Victoria publication *Getting Started with Workplace Health and Safety: An Introduction to Workplace Consultation* for guidance.

If you are using a consultant:

- ensure that they have the skills, knowledge and experience to do the job, and that they are familiar with the legal requirements
- work closely with them to ensure that your needs are met. Involve your own staff throughout the process, particularly key managers/supervisors and health and safety representatives
- make sure you understand what the consultant is recommending or implementing, as you will be responsible for the recommendation or action when you adopt it.

HAZARD IDENTIFICATION PHASE

Step 2: Identify all chemicals stored and used

It is important for you to know exactly what chemicals are being used and/or stored at your workplace so that you can work out which chemicals are hazardous or dangerous goods.

Identify all substances/products used and stored at the workplace

Identify and list substances used and/or stored at the workplace. A sample register shown in Appendix 1 may assist the process.

Substances can be identified by talking to employees and checking:

- labels of containers
- inventories, stocktake lists, manifests and purchasing records
- areas where substances are used and stored
- any existing MSDSs.

This is a good opportunity to dispose of empty containers and products that are no longer used.



Step 3: Obtain and review Material Safety Data Sheets

Apart from labels, the material safety data sheet (MSDS) is the basic information source for most chemicals. MSDSs are sometimes known by other names such as safety data sheets, safety sheets, or even just data sheets.

MSDSs should provide:

- information about the substance's product/trade name
- the proper shipping name, UN number, class, subsidiary risk, and packing group if the substance/s or article/s are classified as dangerous goods
- a statement that the substance is a hazardous substance
- health hazard information
- precautions for safe use
- details about the substance(s)' chemical and physical properties
- the names of the ingredients and their proportion (or proportion ranges)
- First Aid information
- date of preparation or review
- exposure standard(s)
- manufacturer or importer details, including Australian address and contact numbers.

Obtain a current MSDS

Contact the manufacturer, importer or supplier (excluding retailers*) to obtain an up to date MSDS for those substances where an MSDS is not available on site, or if the MSDS that you have is more than five years old.

*retailers are exempt from having to supply MSDSs



You could set up a purchasing system to make sure that:

- an up to date MSDS is always available for all substances purchased; and
- new substances introduced into the workplace are added to the register – see Step 5.

A purchasing system should incorporate the following actions:

- if the product to be purchased is not listed in the register, ask the manufacturer or importer if it is classified as dangerous goods or a hazardous substance. If it is, request an MSDS
- a product classified as dangerous goods or a hazardous substance should not be purchased if a current MSDS is not available
- if the substance is not classified as dangerous goods or a hazardous substance, ask for confirmation in writing and request information on safe use.

It is a good idea to obtain an MSDS before buying a substance so that you can do a preliminary risk assessment before using it.

By reviewing the MSDS before purchase, you can check if:

- a safer product can be used for the job
- a safer form of the product is available e.g. pellets instead of powder, or a ready-to-use product instead of concentrate
- you have appropriate safety measures in place, or whether additional measures are required
- use of the product requires additional measures such as air monitoring, health surveillance, or a carcinogen licence or notification etc.

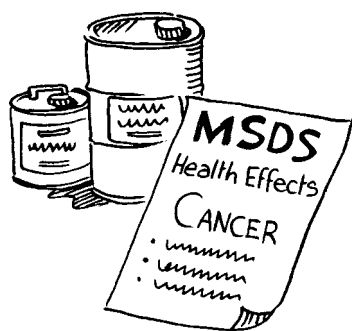
Review the MSDS

When reviewing the MSDS, you should check whether:

- it contains the information required by the regulations (refer to MSDS requirements on page 5)
- information provided is acceptable e.g. written in plain English; clearly laid out; useful
- the MSDS is less than five years old.

If the MSDS does not comply with the regulations or the information is inadequate:

- notify the manufacturer, importer or supplier; or
- return the product to the manufacturer, importer or supplier; or
- obtain the product from a different manufacturer, importer or supplier.



Step 4: Check and ensure containers of chemicals and chemicals in systems/pipework are adequately labelled or identified

Labels and package markings are used to identify a product and provide relevant information to the end user so that the product can be used safely. Labels and package markings should provide information including:

- the word 'hazardous', the dangerous goods class 'diamond', and/or the poisons or Agvet label
- the name(s) of the ingredient(s)
- the trade name of the substance
- possible harmful effects of the substance
- how to use the substance safely
- the name, address and contact telephone number of the Australian manufacturer or importer.



Ensure that containers of substances/goods supplied to the workplace are labelled properly

- Check labels when the product is received (this may be done by a purchasing officer or stores manager).
- Regularly check labels of containers in use and in storage to make sure they are intact and legible.
- Notify the manufacturer, importer or supplier if the container is not labelled properly; or if the label comes off, tears, or becomes illegible during storage or use. If you are not satisfied with the response, return the product to the supplier or obtain the product elsewhere.



Ensure that containers of decanted substances are labelled with at least the product name. (Dangerous goods transferred to a portable container also need to be labelled with the class and subsidiary risk labels)

If a substance is to be left unattended it must be labelled with the product name.

- Provide employees with information and instruction on what needs to be included on the labels of decanted substances.
- Regularly inspect the workplace(s) where substances are used.
- Provide adequate daily supervision of staff who use substances.
- You may add additional information such as risk and safety phrases; type of hazard; or warnings such as "hazardous" to labels if desired.

Labelling is not required if a decanted substance is used immediately and the container is cleaned immediately after use, or its contents have been made safe (e.g. neutralised, deactivated or cured) in some way.



Ensure contents of any unlabelled containers found are labelled appropriately or discarded

- If you find any unlabelled containers of chemicals, label them if you are sure of the contents.
- If you are not sure of the contents, attach a label such as "CAUTION DO NOT USE: UNKNOWN SUBSTANCE". Then either take steps to ascertain what the contents are or contact the local waste management authority to arrange for the substance's safe disposal.



- Ensure that hazardous substances/dangerous goods in “systems” (such as pipes, vessels, or other equipment that forms part of a manufacturing process) are identified**

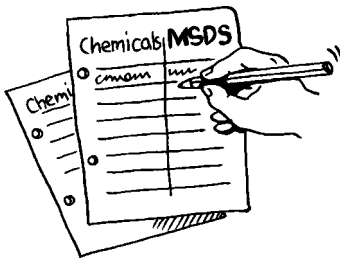
- Determine a suitable form of identification such as colour coding or signage for systems containing hazardous substances/dangerous goods. Refer to relevant Australian Standards for guidance.
- Provide employees (including maintenance workers and contractors) who may be exposed to the substances with information and instruction on the method of identification so that they are aware of the contents of “systems”.

Step 5: Set up a hazardous substances/dangerous goods (or chemicals) register

A register is a list of all hazardous substances and/or dangerous goods supplied to the workplace and includes a copy of the MSDS for each of those substances.

- Check the MSDS and label to determine if a substance is classified as dangerous goods or a hazardous substance**

- The MSDS for a hazardous substance should include a statement to indicate that it is hazardous.
- The MSDS for dangerous goods should state the proper shipping name, UN number, class, subsidiary risk and packing group.
- The label for a hazardous substance should display a warning such as “hazardous”, “poison”, “warning” or “caution” and include any relevant risk and safety phrases.
- The label for dangerous goods should display the relevant class “diamond”.



- List the product names of all substances identified as hazardous and/or dangerous goods and keep the relevant MSDSs with the list**

You may list all products used at your workplace in a chemicals register. In this case, you need to indicate which products are classified as hazardous and/or dangerous goods.

The sample register format shown in Appendix 1 suggests recording additional information that could be useful. A register containing such additional information may be useful in managing the use of chemicals generally.

- Keep the register up to date**

- Add new substances to the list and remove those that are no longer being used and are not likely to be used again.
- Replace old MSDSs.

The register can be maintained through:

- the purchasing procedure
- checking purchasing records
- regular or scheduled reviews to ensure that all substances being used are listed and that MSDSs are up to date
- inspection of the workplace to check whether products used are on the register
- contacting the manufacturer or importer to check that the MSDSs are current.

Step 6: Ensure MSDSs are accessible to employees (and other relevant people)

Material safety data sheets must be readily accessible so that employees and other relevant people (e.g. emergency services) can identify the substance, its hazards and what precautions need to be taken.

Keep MSDSs near areas where substances are used

You can compile lists of the substances used at particular work areas and these can be used to check that all relevant MSDSs are available. Make sure MSDSs are replaced when updated MSDSs are received.

Where microfiche or computerised databases are used, make sure that:

- the MSDSs represent the manufacturer's or importer's MSDS
- the MSDSs are up to date
- information contained in the MSDS is not altered
- you can print a copy of the MSDS.

Tell employees where the MSDSs are kept and, where necessary, how to access them

Where MSDSs are in microfiche form or on a computerised database, you may need to provide employees with instruction or training on how to access them. Instruction on the purpose of MSDSs, what information to look at and how the MSDSs should be interpreted should form part of any training program on chemicals.



RISK ASSESSMENT PHASE

Step 7: Assess the risks associated with chemicals used and stored

You need to assess the health risks associated with hazardous substances used. For dangerous goods, stored and handled, identify the hazards and assess the risks to people and property. This guide focuses mostly on risks to health. For assistance with hazards and risks involving dangerous goods, such as fire, explosion, corrosion, spontaneous combustion etc., refer to the *Dangerous Goods (Storage and Handling) Regulations 2000* and the *Code of Practice for the Storage and Handling of Dangerous Goods*. The Code also provides specific guidance for retail outlets or workplaces that store only minor quantities of dangerous goods.

Risks to health

People can be exposed to substances in different ways. Substances may come into contact with skin or eyes, or may be inhaled, swallowed or injected. The level of exposure depends on factors such as how a substance is handled, quantities used and the effectiveness of safety measures such as ventilation or personal protective equipment (PPE).

In terms of risk, small quantities of some substances can be harmless. In large amounts, however, especially if exposure takes place over a long period, the same substances can cause serious harm or kill you. Conversely, some substances in very small quantities can cause serious harm or death if they are not used and stored safely.

The results of the risk assessment will indicate the areas where safety measures are necessary.

Routes of exposure

Skin contact



Inhalation



Ingestion



Eye contact



Decide who will conduct the risk assessment(s)

Select a competent person(s) who:

- has appropriate skills, knowledge and experience; and
- has a practical understanding of work being undertaken at the workplace; and
- is familiar with the legal requirements.

Risk assessment is best conducted by a team comprising employees, health and safety representatives, supervisors and managers. These people should be involved even where a consultant is used. Involving them in the process allows them to contribute to, and understand, the outcome of the assessment and any actions to be taken.

**□ Plan and prioritise
the risk
assessment(s)**

The plan should include what needs to be done, by whom and when.

Process and generic type assessments that cover more than one substance at a time can also be undertaken. These will reduce the need to conduct separate assessments for every substance at every work site.

Process assessments involve assessing a particular process as a whole where there may be more than one substance involved. Generic assessments apply when the same substances are used in a similar way under similar circumstances at more than one work area or workplace.

NB: If you have hazardous substances and dangerous goods, you can combine the assessments and assess all risks to people and property at the same time.

Plan the assessments and consider breaking down the assessments into more manageable tasks. You can do this by:

- dividing up the workplace by area or process/task; or
- grouping similar substances used in similar ways, for example:
 - a range of similar solvents mixed or decanted in a particular process, or in a similar way
 - a range of adhesives (glues) applied to a particular surface in the same way
 - a range of dyes and colours in the same form (e.g. liquid) mixed and applied/used in the same way
 - a range of cleaning products used to clean a particular piece of equipment/area in the same way e.g. sprayed on, wiped on, brushed on etc.
 - a range of products automatically pumped into an enclosed reactor vessel.

Whichever way you group assessments, you need to make sure all risks are taken into account. Using a worst case scenario approach may assist.

Prioritise assessments

In deciding which assessments to do first, think about where:

- complaints, accidents, incidents and illnesses have occurred
- more hazardous chemicals are used or stored
- safety measures are not in place or used
- there is likely to be a greater risk to health or property
- more people or areas are likely to be affected.

Areas where little or no assessment has taken place should also be considered a priority.

□ Carry out the risk assessment(s)



Before beginning the assessment process, you may want to:

- consider using the risk assessment pro-formas in Appendix 2 to help you to do the assessment
- choose a form or a combination that best suits your situation.

Factors that should be considered in a risk assessment relate to the substance itself, how it is used, and other factors as outlined below.

1) Information about the substance(s)

Refer to the MSDS and label, and any relevant standards and codes, to obtain information about the substance.

You need to know such things as:

- how harmful/toxic or irritating the substance is
- the form of the substance being used (e.g. powder, pellets, liquid, gas)
- how concentrated the substance is (e.g. concentrate or dilute)
- the chemical properties of the substance (e.g. ability to: form vapours readily; cause burns; give off odours; catch fire; explode, spontaneously combust; cause corrosion, poisoning or oxidation; or react with water, other substances or plant).

2) How the substance is used

Consider:

- the different tasks/processes involving the substance(s) (e.g. decanted, mixed, blended, sprayed, brushed on, heated, placed on conveyor etc.). Look at preparation, application, clean up and storage risks
- the quantities used
- form of the substance people are exposed to (e.g. liquid, mist, vapour, dust etc.)
- possible routes of exposure (e.g. whether you: breath it in [inhalation]; swallow it [ingestion]; absorb it through the skin [absorption]; have contact with it through skin or eyes; or inject it [intentionally or unintentionally])
- who is, or may be, exposed to the substance
- how long, and how often, people are exposed
- which property/areas are likely to be affected by the effects of the substance
- safety measures already in place, including emergency and First Aid procedures, and whether they are used and effective
- the estimated level of exposure.

3) Other factors

Consider:

- any information relating to accidents, incidents, illnesses, or symptoms of exposure. (Hint: check the accident or injury register)
- whether the substance is stored correctly and safely i.e. away from other incompatible chemicals and ignition sources such as matches, open flames, pilot lights, electrical equipment, heat, static electricity and items/machinery causing sparks
- outside factors such as guided tours, power shut downs and maintenance
- the need for any testing such as atmospheric monitoring or health surveillance.

For further information and case studies refer to the *Code of Practice for Hazardous Substances* and the *Code of Practice for Storage and Handling of Dangerous Goods* produced by WorkSafe Victoria.

Record the result of the risk assessment

The result of the assessment must be recorded.

- You should record the:
 - name of the person doing the assessment
 - date of assessment
 - premises/area/process assessed
 - substances assessed
 - brief description of process/tasks involved (including quantities used, concentrations, frequency and duration of exposure)
 - safety measures in place
 - type of risks identified (e.g. health, fire, corrosion, spontaneous combustion etc.)
 - results of any monitoring/testing performed
 - the result of the assessment i.e. whether there are risks to health or property
 - reasons for your conclusion.
- If you are unsure whether a risk exists, record this and the information above. If unsure, further testing such as atmospheric monitoring or health surveillance may be required (refer to Step 9). You may also need to seek advice from a safety specialist in this situation.
- If you conclude that the use of a substance does not result in a risk to health or property, you also need to record this. The level of detail recorded should reflect the complexity of the process being assessed. Generally, the more complex the process, the more detail that should be recorded.
- The proformas in Appendix 2 can be used to record your assessment.
- Refer to the codes of practice for further guidance.

□ Review and revise the risk assessment as necessary and at least every five years

- Schedule regular reviews to make sure that the assessment is valid and still applies.

A change could result in a new risk being generated and trigger the need to introduce or modify a safety measure e.g. changing from pellets to powder would introduce risks of possible inhalation and dust explosion. Both of these situations would result in the need for new and/or modified safety measures.

- Establish the circumstances that would tell you when a review or revision is required. For example:
 - an accident, incident or near miss involving the substance(s)
 - symptoms reported which may be related to the substance(s) used
 - a change in the product used (including its form e.g. powder, pellet, liquid, gas)
 - the introduction of a new work process or changes to an existing process
 - an increase in the duration and frequency of potential exposure e.g. an increase in hours worked by employees using a substance(s)
 - an increase in the quantities or concentration used
 - a change to the location where the substance is used or stored
 - failure of safety measures in place
 - availability of new information about the health hazards linked to the substance
 - a change in the exposure standard as indicated on the MSDS
- You can instruct relevant personnel, such as management, supervisors, health and safety representatives, and purchasing officers to feed back the above information. This will allow it to be incorporated into the assessment process. Sources of information such as incident or injury registers, maintenance records, production records and updated MSDSs should also be used.
- Record the date of the review or revision of the assessment, including the outcome, any action required, by whom and when.

Step 8: Undertake atmospheric monitoring and/or health surveillance if required

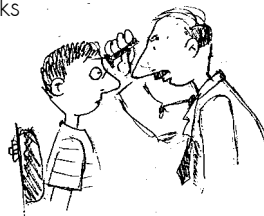
Atmospheric monitoring means doing tests to measure the concentration of a substance in the air. It therefore estimates what substances employees may inhale. It may also be important if certain atmospheric limits need to be maintained (e.g. so that flammable vapours are detected before explosive concentrations are reached). In terms of health, you need to remember that air monitoring only looks at what may be breathed in. Substances can be also absorbed through the skin and eyes, and in some cases may be ingested or injected. In these cases, air testing does not tell you about an employee's total exposure.

Health surveillance (health checks) can be used to check for certain health effects and may include medical examinations and biological tests (e.g. blood, urine) that check for the presence or concentration of a substance or its breakdown products. Health surveillance takes into account all routes of exposure. Both techniques can be used to check the effectiveness of safety measures and to determine risks to health where there is uncertainty.

Blood Tests



Eye Checks



Determine if atmospheric monitoring is required

- Atmospheric monitoring under the OHS (Hazardous Substances) Regulations is required where there is an exposure standard for the hazardous substance or any of its ingredients, and:
 - you are not sure whether the exposure standard may be exceeded; or
 - atmospheric monitoring is required to determine if there is a risk to health.
- Refer to the MSDS to see if there is an exposure standard for the hazardous substance or any of its ingredients.
- Refer to the results of the risk assessment to determine if there is any uncertainty as to whether the exposure standard may be exceeded, or if atmospheric monitoring was considered necessary to assess the risk to health.
- Atmospheric monitoring may also need to be carried out for dangerous goods to ensure a safe atmosphere is maintained. Whether monitoring is required will depend on the hazards identified and the outcome of the risk assessment.
- Refer to MSDSs to see if there are upper and lower flammable or explosive limits for the dangerous goods involved.
- Check the results of the risk assessment to determine if unsafe atmospheric concentrations (i.e. flammable or explosive) may be present or are likely to occur.

□ Conduct atmospheric monitoring if required

Select a competent person to do the monitoring and interpret the results. A competent person would generally be someone with occupational hygiene or safety knowledge, or experience in monitoring.

- Record the results of atmospheric monitoring (refer to the Code of Practice for guidance on what needs to be recorded).
- Provide results to relevant employees and include an explanation of the results.

□ Decide if health surveillance is required for substances used

Health surveillance is required where:

- a substance is listed in Schedule 3 of NOHSC's *National Model Regulations*; and
- exposure is such that there is a likelihood of an adverse health effect under the particular conditions of use.

Therefore you need to:

- check whether the hazardous substances or ingredients shown in the MSDS are in Schedule 3; and
- determine if it is likely that employees' health will be affected by reviewing the results of the risk assessment and the type of safety measures in place.

The Code of Practice provides guidance on situations where health surveillance may be required. It also includes a list of substances requiring health surveillance.

□ Establish a health surveillance program where required

In situations where health surveillance is required:

- identify employees requiring health surveillance
- appoint a medical practitioner to supervise health surveillance
- consult the medical practitioner as to what sort of health surveillance is required and how often it needs to occur
- contact the medical practitioner to discuss what the report(s) will look like and when they will be received
- provide the medical practitioner with relevant information e.g. copies of risk assessment reports; job descriptions of relevant employees; incident reports; MSDSs
- establish a schedule for the health surveillance
- provide information to employees on the purpose and type of health surveillance to be undertaken
- establish a secure filing system for confidential medical reports
- provide a copy of the health surveillance report to the employee concerned
- follow up any recommendations in the health surveillance report and ensure that safety measures are reviewed or revised where necessary

- provide a copy of the health surveillance report to WorkSafe Victoria where the medical practitioner recommends that measures be taken to ensure an employee is not exposed.

The frequency of health surveillance will depend on the results of the risk assessment and the type of safety measures relied upon. The frequency may be varied depending on the initial health surveillance results and any safety measures subsequently put into place.

NB: If safety measures implemented are highly effective in controlling risks to health and ensuring that there is no likelihood of health effects, health surveillance will not be required.

RISK CONTROL PHASE

Step 9: Eliminate or minimise any risks to people and property

Where there is a risk to people or property, you will need to put into place safety precautions to eliminate or reduce that risk so far as is practicable. Various measures can be implemented to eliminate or reduce risk. These are listed below in order of effectiveness according to a hierarchy of risk control (Table 1.1). The more effective measures appear higher up the list. Examples of some safety measures are listed in Appendix 4. Personal protective equipment should only be considered where a risk still exists after applying the other measures as far as is practicable. In practice, a combination of safety measures is usually required to control a risk.

With dangerous goods, reducing the amount stored or used will reduce the risks significantly. In addition to a general duty to control risk, there are also some specific safety precautions that must be addressed according to the Regulations. These are listed in Table 1.2 below.

Table 1.1 Hierarchy of risk control

1) Elimination

Where a task involves the use of a substance or process that is not essential, the substance or process should be eliminated, or the risk associated with the substance or process eliminated if practicable e.g. using steam cleaning rather than washing with a solvent; using clips, clamps, bolts or rivets instead of an adhesive.

2) Substitution

Substitution involves using a safer product or process. This includes exchanging the substance for one that is less harmful; using the same substance in a less hazardous form; or using the same substance in a less hazardous process.

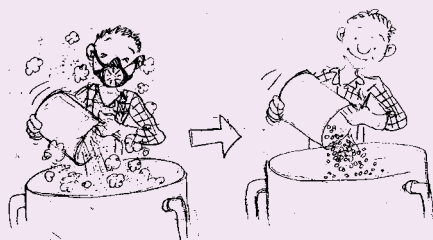


Figure 1: Using pellets instead of powders

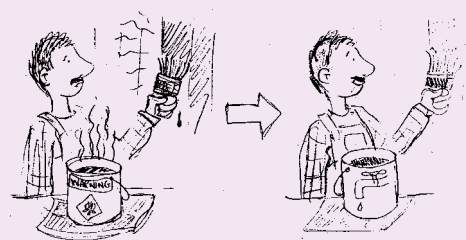


Figure 2: Using water-based paint instead of oil-based paint

Isolation

Isolation involves isolating the process or substance from employees, non compatible materials and ignition sources using either distance or barriers, or both, to prevent or reduce employee exposure and risks associated with dangerous goods e.g. fire, explosion etc.

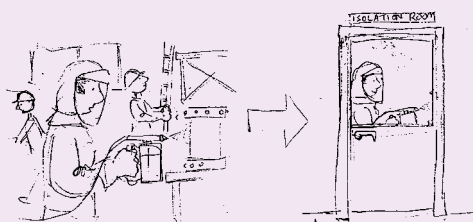


Figure 3: Using a spray booth to isolate a process

Engineering controls

Engineering controls involve the use of equipment or processes which:

- stop or reduce new or unwanted substances from being generated
- stop or contain substances so that they are not released into unwanted areas e.g. via ventilation
- reduce the area of contamination in the event of spills or leaks.



Figure 4: Installing a ventilation system to remove unwanted fumes

3) Administrative controls

Administrative controls are systems of work or safe work practices that prevent or reduce risks to health, property and the environment.

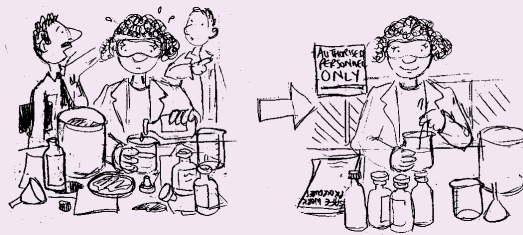


Figure 5: Keeping lids on containers, cleaning up spills and restricting unnecessary access reduces risks

4) Personal protective equipment (PPE)

PPE is protective clothing and equipment for employees, supervisors and visitors, and is the least effective safety measure. It should only be used where it is not practicable to use other measures, or when other measures do not adequately control exposure.



Figure 6: Different types of personal protective equipment

Table 1.2 Specific risk control duties associated with dangerous goods

If dangerous goods are stored or handled, there must be compliance with specific risk control duties attached to the following issues:

- design of new premises, plant, processes and systems of work
- risks to workers
- visitors to premises
- security at premises
- stability of goods
- isolation of goods
- interaction with other substances
- interaction with other plant and processes
- condition and repair of structures and plant
- containers for bulk dangerous goods
- clearing of decommissioned receptacles
- protection from impact
- spill containment
- transfer of dangerous goods
- ignition sources in hazardous areas
- ventilation and atmospheric emissions
- placarding if quantities exceed relevant threshold level, or if bulk containers or storage of dangerous goods are present
- maintenance and revision of manifest if quantities exceed relevant threshold level
- equipment for clean-up
- general fire protection
- fire protection for premises housing quantities that exceed relevant fire protection level
- planning for emergencies

Refer to the *Dangerous Goods (Storage and Handling) Regulations 2000* and the associated Code of Practice for further details.

□ Determine appropriate safety measures

The results of the risk assessment should indicate where risks exist and therefore the type and level of safety measures required. You also need to:

- refer to the MSDS and label, and relevant Standards for recommended safety measures
- refer to the regulations that specify the order in which safety measures must be considered
- refer to the codes of practice and Appendix 4 for examples of the types of safety measures to consider
- contact relevant industry associations, unions or consultants if you need assistance
- refer to Appendix 5 for useful publications and additional sources of information.

□ Plan what, how and when safety measures will be implemented and by whom

Set priorities for putting safety measures in place.

- Priorities should take into account the: nature and severity of the risk; number of people/properties that may be affected; and practicability of implementing measures.
- Specify immediate, interim and long-term measures as appropriate.
- Indicate what safety measures are to be implemented.
- Record the date of completion and “sign off” by a person with authority.

The work sheet in Appendix 3 can be used to record a risk control plan.

Emergency plans and procedures must also be included when planning future safety measures in case of leaks, spills, or other uncontrolled releases of hazardous substances or dangerous goods.

□ Ensure safety measures are used and maintained

This can be achieved by:

- providing appropriate information, instruction, training and supervision of staff
- ensuring deficiencies or failure of safety measures are reported, recorded and rectified
- establishing a maintenance procedure.

The maintenance procedure should specify:

- *the type of maintenance* e.g. visual checks, testing, and preventative maintenance according to any manufacturer’s specifications or the relevant Australian Standard
- *the frequency of maintenance* e.g. start of each shift; periodically; according to any manufacturer’s specifications or relevant Australian Standard; and
- *the records or reports to be kept* including any remedial action required; when it should be completed and by whom; and a means of signing off on completion.



Step 10: Provide information, instruction and training

Employees need to know how to use and store substances safely. The regulations require employers to provide information, instruction and training to employees on the hazards and risks associated with hazardous substances and dangerous goods that they use or may be exposed to. Where dangerous goods are stored or handled, other persons on site such as contractors, maintenance workers, administrative staff and visitors may also need to be given information, instruction and training on associated risks and precautions to be taken.

Identify who needs to be provided with information, instruction and training

- Identify employees and others who use chemicals, or who may be exposed to chemicals at the workplace.
- Checking employees' job descriptions, risk assessment reports and risk control plans should help you to identify these people.

Decide what information, instruction and training is to be provided, when, and how it is to be done

Training for employees should generally cover:

- how to read chemical labels and MSDSs
- how chemicals can contact and enter the body
- the possible health effects of chemicals used
- the results of risk assessments
- what safety measures are in place, why they are there, and how to use them properly e.g. ventilation, correct wearing and use of PPE
- emergency and First Aid procedures
- what to do if a leak, spill or uncontrolled release of a substance occurs.

The type and level of information, instruction and training will depend on the risks present; work being carried out; and the skills, knowledge, experience and literacy of the people to be trained. Refer to the codes of practice for further guidance.

Decide who will prepare and provide information, instruction and training

- Training may be conducted internally, contracted out, or a combination of both.
- Nominate the person or team to develop and provide information, instruction and training.

Provide information, instruction and training, and keep relevant records

A record of attendees, the dates of training and course content could be used to check who has been trained and to demonstrate compliance with the regulations.

Review any information, instruction and training provided to see how effective and useful it is

- This can be done through on-the-job observation or through a formal written or verbal assessment. Reviews will help to determine if any new information or refresher training is required.
- Review and, where necessary, revise the training periodically to ensure that it is still relevant to the substances used and the way they are used. The codes of practice provide guidance on when training should be reviewed.

Step 11: Identify and undertake specific duties if scheduled carcinogens and threshold quantities of dangerous goods are stored or used

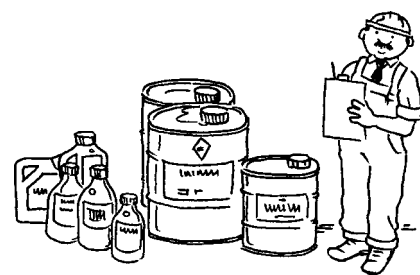
Determine whether scheduled carcinogenic substances are used

Additional requirements apply to carcinogens (cancer causing substances) listed in schedules 1 and 2 of Part 2 of the *National Model Regulations* on carcinogens (except asbestos and cyclophosphamide).

- Workplaces other than laboratories are prohibited from using Schedule 1 carcinogens.
- A **licence** must be obtained from WorkSafe Victoria for:
 - use of Schedule 1 carcinogens in a laboratory
 - use of Schedule 2 carcinogens in a workplace other than a laboratory.
- WorkSafe Victoria must be **notified** of the use of Schedule 2 carcinogens in a laboratory.
- Check the MSDS to determine if the substance or any of its ingredients are scheduled carcinogens.

Determine if threshold quantities of dangerous goods are located on site

- The *Dangerous Goods (Storage and Handling) Regulations 2000* require extra duties to be undertaken in relation to notification, placarding, manifest and fire protection where threshold, or above, quantities of dangerous goods are located.
- The threshold quantities are found in Schedule 2 of the Regulations. You need to check the quantities of dangerous goods and other chemicals that may react with them on your site and on neighbouring sites. You then need to check Schedule 2 and determine if the threshold quantities of individual classes and/or mixed classes of dangerous goods on your site are reached. If the threshold levels are reached, the extra duties will need to be undertaken.
- Refer to the Regulations and the Code of Practice for the Storage and Handling of Dangerous Goods for further guidance in relation to notification, placarding and manifest, and fire protection requirements.



Submit a notification or licence application to WorkSafe Victoria if required

Obtain licence application and notification forms from WorkSafe Victoria.

For hazardous substances, the information to be included in a licence application or notification is detailed in Part 4 of the OHS (Hazardous Substances) Regulations.

For dangerous goods, the information to be included in a notification form is detailed in Part 5 of the *Dangerous Goods (Storage and Handling) Regulations 2000*.

Ensure compliance with the terms and conditions of any licence or notification

This can be achieved through close supervision and by providing relevant employees with information, instruction and training so that they:

- understand the risks to health and/or property
- know what safety measures are in place, why they are required, and how they are to be used
- are familiar with any terms and conditions imposed by WorkSafe Victoria.

Step 12: Document and check the way you do things

Record how chemicals are managed in your workplace

This should include resources, policies and procedures, work instructions, records and any checklists used.

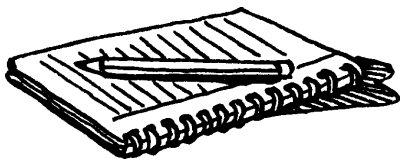
Such documentation ensures that there is a systematic and consistent way of managing the use of chemicals even if there are changes in personnel. It also forms the basis for training employees and for continuous improvement.

Conduct regular inspections or checks to ensure that policies, procedures, work instructions etc. are followed and remain effective

- Schedule and conduct inspections/checks or monitor through daily observations and supervision.
- The frequency of the inspections should reflect:
 - the size and complexity of the business/workplace
 - the number and types of policies and procedures required to be audited; and
 - the nature of the potential risk associated with the chemicals used or stored.
- To ensure continuous improvement, monitor any deficiencies detected, action needed, persons responsible and timeframes for the completion of any actions.

Record the results of the inspections/checks and provide feedback to relevant people

- Identify strengths and weaknesses and highlight these.
- Note any actions to be taken, by whom and when.
- Communicate results of inspections to relevant employees and managers.
- For further guidance, refer to the WorkSafe Victoria publication *Getting Started with Workplace Health and Safety: An introduction to Workplace Health and Safety Policies, Procedures and Evaluation*.



Appendix 1 – Chemicals (Hazardous Substances/Dangerous Goods) Register

Company: _____

Site/area: _____

Product name	Location or process where product is used	Is product hazardous?	Is product dangerous goods?	
		Y/N	Y/N	Class

Date for review of register : _____

* All hazardous substances/dangerous goods must have an up to date MSDS no more than five years old. The MSDS should state that the product is hazardous or, in the case of dangerous goods, it should provide the proper shipping name, UN number, class label and subsidiary risk.

Person compiling register: _____

Date: _____

MSDS*		Risk assessment				Actions/Comments
		Haz Sub		DG		
Y/N	Date	Y/N	Date	Y/N	Date	

Appendix 2(a) – For assessments involving chemicals, particularly hazardous substances and dangerous goods

ASSESSMENT RECORD

Work unit (job/activity): _____

Work areas/site: _____

Substances/Goods	Description of use (List tasks carried out and include quantities used)	Routes of exposure (inhalation, ingestion, eye/skin contact, injection)

Reported health effects/accidents/incidents: _____

Comments: _____

Assessor's signature: _____

Approved by (name): _____

Assessment team: _____ Date: _____

Personnel: _____

Current safety measures	Is there a risk to health? (Give reasons)		Action required (Include by whom and when)
	Y/N Not sure		

Date: _____

Signature: _____ Date: _____

Appendix 2(b) – Assessment Record continued...

ASSESSMENT RECORD

Work unit (job/activity): _____

Work areas/site: _____

Substances/Goods	Description of use (List tasks carried out and include quantities used and stored)	Types of hazards (fire, explosion, corrosion, spontaneous combustion etc.)

Reported health and property effects/accidents/incidents: _____

Comments: _____

Assessor's signature: _____

Approved by (name): _____

Assessment team: _____ Date: _____

Personnel: _____

Current safety measures	Is there a risk to people or property? (Give reasons)		Action required (Include by whom and when)
	Y/N Not sure		

Signature: _____ Date: _____

Appendix 2(c) – For assessments involving hazardous substances and dangerous RISK ASSESSMENT REPORT

Company/workplace: _____ **Area/location:** _____
Assessed by: _____ (Position) _____
_____ (Health and Safety Representative)
_____ (Other: _____)

PROCESS / JOB:

BRIEF DESCRIPTION (Include how the job is done; whom or what may be exposed to substances; how often and how long they may be exposed etc.)*:

TASKS (STEPS) INVOLVED e.g. preparation, mixing, spraying, applying, clean up, storage **(describe briefly):**

- 1.
- 2.
- 3.
- 4.
- 5.

Have any accidents, incidents, near misses or symptoms occurred?

YES / NO?

If YES, provide details (substances involved, tasks, action taken etc.)

*For further guidance, refer to the case studies in the Code of Practice for Hazardous Substances or Code of Practice for Storage and Handling of Dangerous Goods.

goods

DATE:

Job, task or process: _____



A large, empty rectangular box with a thin black border, occupying the majority of the page below the purple bar. This area is intended for detailed notes or descriptions related to the job, task, or process mentioned above.

PROCESS / JOB:

REVIEW OF PRODUCT(S)/SUBSTANCE(S) USED DURING PROCESS/JOB [Refer to MSDS]

Product	Form	Possible health effects
1. _____ <i>Approximate quantity used:</i> <i>Is it used as supplied or diluted?</i>	<input type="checkbox"/> Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Gas <input type="checkbox"/> Other	Inhalation: Skin: Eye: Ingestion: Injection:
2. _____ <i>Approximate quantity used:</i> <i>Is it used as supplied or diluted?</i>	<input type="checkbox"/> Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Gas <input type="checkbox"/> Other	Inhalation: Skin: Eye: Ingestion: Injection:
3. _____ <i>Approximate quantity used:</i> <i>Is it used as supplied or diluted?</i>	<input type="checkbox"/> Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Gas <input type="checkbox"/> Other	Inhalation: Skin: Eye: Ingestion: Injection:
4. _____ <i>Approximate quantity used:</i> <i>Is it used as supplied or diluted?</i>	<input type="checkbox"/> Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Gas <input type="checkbox"/> Other	Inhalation: Skin: Eye: Ingestion: Injection:
5. _____ <i>Approximate quantity used:</i> <i>Is it used as supplied or diluted?</i>	<input type="checkbox"/> Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Gas <input type="checkbox"/> Other	Inhalation: Skin: Eye: Ingestion: Injection:

* Relevant properties are properties that may result in risk e.g. volatility (i.e. evaporates readily); pH (corrosive, acid, caustic); odour. If assessing dangerous goods requirements at the same time, record all chemical properties associated with the substance and assess risks associated with these properties.

DG class and sub risks	UN no.	Relevant properties*

PROCESS/JOB:

TASK BEING ASSESSED (e.g. storage, preparation, mixing, spraying etc.):

NB: **Use a separate page for each task involved in the process/job**

Hazardous substance(s)	Exposure routes	Existing safety measures
	<input type="checkbox"/> Inhalation <input type="checkbox"/> Skin <input type="checkbox"/> Eye <input type="checkbox"/> Ingestion <input type="checkbox"/> Injection	
FURTHER ACTION REQUIRED (where result of risk assessment is 'yes' or 'not sure'):		

NOTES: Copy and attach more pages if necessary

1. More than one product can be assessed as long as all risks are taken into account. Refer to the Codes of Practice for Hazardous Substances and the Code of Practice for Storage and Handling of Dangerous Goods for further guidance.
2. Exposure routes depend on form and properties of the product and how it is used.
3. The reasons given for the result of the risk assessment could include:
 - existing safety measures and their effectiveness. Reference can be made to other documents that specify what safety measures are in place
 - quantity, concentration, frequency and duration of use
 - observations/results of any tests (air monitoring or health surveillance)
 - nature of work and form, and properties of the product or its ingredients
 - incidents, symptoms reported etc.

If 'yes', there is a risk. Refer to the risk control measures worksheet.

If assessing dangerous goods requirements at the same time, complete the following sheet(s) listing the goods that are being assessed; the type of risk assessed (e.g. fire, corrosion, oxidation, spontaneous combustibility, water reactivity etc.); the safety measures in place and their effectiveness; and whether there is a risk to health and/or property.

Is there a risk to health [Yes/No/Not sure]	
Result	Reasons (see below)

PROCESS/JOB:

TASK BEING ASSESSED (e.g. storage, preparation, mixing, spraying etc.):

NB: **Use a separate page for each task involved in the process/job**

Dangerous Goods	Type of hazard	Existing safety measures
	<input type="checkbox"/> Fire <input type="checkbox"/> Explosion <input type="checkbox"/> Corrosion <input type="checkbox"/> Spontaneous combustion <input type="checkbox"/> Other (state)	

FURTHER ACTION REQUIRED (where result of risk assessment is 'yes' or 'not sure'):

The reasons given for the result of the risk assessment could include:

- existing safety measures and their effectiveness. Reference can be made to other documents that specify what safety measures are in place
- quantity, concentration, frequency and duration of use/storage
- observations/results of any tests
- nature of work and form, and product properties or ingredients
- incidents, symptoms reported etc.

If 'yes', there is a risk. Refer to the risk control measures worksheet.

Is there a risk to people or property?
[Yes/No/Not sure]

Result

Reasons (see below)

Appendix 3 – Risk Control (Safety) Measures Worksheet

Company/workplace: _____ Date: _____

Plant/area/location: _____

Substance(s) or job/process/task: _____

Substance or job/ process/task(s)	List safety measures to be put in place (Refer to codes of practice or Appendix 4 for examples)	Due date	Person(s) responsible
	<p>Elimination:</p> <p>Substitution:</p> <p>Isolation:</p> <p>Engineering:</p> <p>Administration:</p> <p>Personal protective equipment (PPE):</p>		

NOTES:

1. This form can be used to record safety measures to reduce risk with individual substances; or for safety measures to reduce risk associated with an entire job, process or task, or a number of tasks. You can attach this sheet to the risk assessment form.
2. Refer to the risk assessment worksheet/record to assess which substances/jobs/processes/tasks require measures to be implemented.
3. Indicate whether safety measures to be put in place are immediate (IM), short term/interim (INT) or long-term (LT) controls.

Appendix 4 – Examples of safety measures

Safety measure
(in order of hierarchy)

Explanation and examples

Elimination

Eliminate the use of the substance by:

- using a physical process instead of a chemical process e.g. using ultrasound to clean equipment instead of a process involving chemicals; using clips/bolts or nails instead of adhesive.

Substitution

Use a safer substance or a safer form of the substance.
Examples:

Safer substance

- use detergent instead of chlorinated solvent for cleaning
- use water-based chemicals instead of solvent-based chemicals where compatible

Safer form or process

- paint with a brush instead of spraying
- purchase a substance in a safer form (e.g. use less concentrated liquids i.e. in ready-to-use form instead of concentrates that require decanting or mixing; use pellets instead of powder that reduces the amount of dust formed)

Isolation

Separate people or property from the substance by distance or barriers. Examples:

- use closed systems
- isolate the process to one room with restricted access or use appropriate barriers/screens to separate substances
- move the process into a positive/negative pressure cabin/room
- distance workers from substances/processes through the use of remote controls
- distance property, incompatible chemicals and ignition sources (e.g. flames, sparks) from goods

Engineering

Use physical controls (such as plant/equipment) that eliminate or reduce the generation of substances; suppress or contain substances; or limit the area of contamination in the event of spills and leaks. Examples:

- use fully or partially enclosed ventilation booths
- fully or partially enclose the process with exhaust extraction
- use local exhaust or natural ventilation systems (e.g. air ducts, open doors/windows)
- use robots
- design buildings that are: compatible with the intended goods; made of non-combustible construction as far as practicable; designed to reduce contamination
- use bunding to contain spillage
- install drains, tanks or sumps to cope with spilled material
- install automatic fire protection and chemical suppression systems

Administration

Use safe work practices including good housekeeping. Examples:

- reduce the amount of property or the number of employees exposed
- reduce the duration and/or frequency of exposure e.g. through job rotation
- reduce the amount of goods/products stored and used
- ensure safe interim storage of wastes/products (e.g. labelled properly in suitable containers stored away from people, the environment, incompatible chemicals, ignition sources etc.)
- vacuum or wet sweep to suppress dust being generated
- cover containers and make sure lids are attached
- clean up spills immediately (includes provision of suitable aids and equipment)
- ensure there is no eating, drinking or smoking in areas where substances are used
- provide suitable washing facilities
- provide First Aid facilities
- instruct employees on how to use substances/equipment safely

Personal protective equipment (PPE)

Provide protective clothing and equipment for employees, supervisors and visitors. NB: items must be compatible with chemical(s) being used/stored. Examples of PPE:

- overalls, aprons, gowns, chemical resistant suits
- footwear (enclosed shoes, safety boots)
- gloves
- chemical resistant glasses (safety glasses)
- face shields/masks, respirators – full/partial
- head protection

Appendix 5 – Further information

Information sources

Victorian WorkCover Authority

Level 24, 222 Exhibition Street, Melbourne, VIC 3000

GPO Box 4306, Melbourne VIC 3001

Tel (03) 9641 1555

Fax (03) 9641 1399

Tollfree 1800 136 089

Local offices

Ballarat (03) 5337 1400

Bendigo (03) 5443 8866

Dandenong (03) 8792 9000

Geelong (03) 5226 1200

Melbourne (03) 9628 8115

Mildura (03) 5021 4001

Mulgrave (03) 9565 9444

Preston (03) 9485 4555

Shepparton (03) 5831 8260

Traralgon (03) 5174 8900

Wangaratta (03) 5721 8588

Warrnambool (03) 5562 5600

Website

www.workcover.vic.gov.au

E-mail

info@workcover.vic.gov.au

Codes of practice and other Victorian WorkCover Authority publications

Victorian WorkCover Authority Publications Unit

Tel (03) 9641 1333

Inquiries

WorkCover Advisory Service

Level 24, 222 Exhibition Street, Melbourne, VIC 3000

Tel (03) 9641 1444

Fax (03) 9641 1353

Tollfree 1800 136 089

Acts and regulations

Information Victoria

356 Collins Street

Melbourne 3000

Tel 1300 366 356

NOHSC publications

Commonwealth Government Bookshop
190 Queen Street
Melbourne 3000
Tel 132447

Relevant NOHSC publications:

Classifying

- Approved Criteria for Classifying Hazardous Substances
- List of Designated Hazardous Substances

Labelling

- National Code of Practice for Labelling Workplace Substances

MSDS

- National Code of Practice for the Preparation of Material Safety Data Sheets

Assessment

- Guidance Note for the Assessment of Health Risks Arising from the Use of Hazardous Substances in the Workplace

See NOHSC website: <http://www.nohsc.gov.au> for other guidance material.

Australian Standards

Standards Australia publications
19-25 Raglan Street
South Melbourne 3205
Tel 1300 654 646

Industry associations

Australian Industry Group (AIG)
20 Queens Road
Melbourne 3004
Tel 03 9867 0111

Plastics and Chemicals Industries Association (PACIA)
263 Mary Street,
Richmond VIC 3121
PO Box 211, Richmond 3121
Tel 03 9429 0670

Australian Chemical Specialities Manufacturers Association (ACSMA)
Level 4, 380 St Kilda Road
Melbourne 3000
Tel 03 9690 8588

Victorian Employers' Chamber of Commerce and Industry (VECCI)
196 Flinders Street
Melbourne 3000
Tel 03 8662 5333

Other industry associations

You may be a member of another industry association. Contact them for information about hazardous substances management in your industry.

Victorian Trades Hall Council (VTHC)

54 Victoria Street
Carlton South 3053
Tel 03 96623511

Your union

You may be a member of a union. Contact them for information about hazardous substances management in your industry.

Contacts for specialist consultants

Australian and New Zealand Society of Occupational Medicine (ANZSOM)

PO Box 304 Collins Street West
Melbourne 8007
Tel 03 9629 3455
Email anzsom@medeserv.com.au

Australian Institute of Occupational Hygienists (AIOH)

34 Carrick Drive
Tullamarine 3043
Tel 03 9335 2577

Australian College of Occupational Health Nurses (ACOHN)

80 Stephensons Road
Mount Waverley 3149
Tel 03 9886 5795

Advice on disposal of hazardous wastes and management of spills

Environment Protection Authority (EPA)

40 City Road
Southbank 3006
Tel 03 9695 2722

On-line information sources

Australia

- National Occupational Health and Safety Commission - www.nohsc.gov.au
- Queensland Department of Employment, Training and Industrial Relations - www.detir.qld.gov.au
- Standards Australia - www.standards.com.au
- WorkCover, NSW - www.workcover.nsw.gov.au
- WorkCover, SA - www.workcover.com/index.html
- WorkSafe Western Australia - www.safetyline.wa.gov.au
- University of Western Australia - www.general.uwa.edu.au/u/soilweb/safety.html

Overseas

- Cambridge University access to chemical journals - www.ch.cam.ac.uk/ChemJournals.html
- Canadian Centre of OSH - www.ccohs.ca
- Health and Safety Executive, UK - www.hse.gov.uk
- National Institute of OSH, USA - www.cdc.gov/niosh/homepage.html
- US Occupational Safety and Health Administration - www.osha.gov

