

# ADVICE FOR MANAGING MAJOR EVENTS SAFELY

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# INTRODUCTION

Major events play an important role in Australian culture. Our cultural diversity and appetite for sport and entertainment has given the State of Victoria an international reputation as the mecca for major events.

The successful hosting of annual large-scale events such as the Australian Formula 1 Grand Prix, Australian Open tennis tournament, Airshows Downunder and Moomba, as well as other popular sporting competitions and concerts at iconic venues including Telstra Dome, Melbourne Olympic Park and the Melbourne Cricket Ground, have reinforced Victoria's status as the nation's leader in managing successful events.

Success is often defined in terms of the spectacle, economic benefit and crowd numbers. Success, however, should also be measured by each event's level of safety.

When attending major events the community has an expectation that they do so without risk of injury and that the event host has systems to ensure their safety.

This publication provides practical information to major event organisers, venue owners and suppliers about the management of safety risks and meeting their duty of care through integrated event safety planning.

The advice provided here is the result of a lengthy consultative process. A range of major event industry representatives from Victoria developed the initial document. As noted in the acknowledgements, these people represent a cross-section of the major event industry. They include event organisers, major venue operators, service providers and government.

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# 1

## WHAT IS A MAJOR EVENT?

Major events range in focus from sport, to entertainment and even cultural gatherings. They can be hosted in permanent purpose-built venues or adapted to temporary environments, e.g. as Albert Park is transformed for the period of the Australian Formula 1 Grand Prix annually. They can be commercial ventures or provide a not-for-profit experience for the local community. They may use existing infrastructure or add additional overlay. They may provide their own event team members, or outsource some functions to contractors. Each event is unique and poses its own specific safety risks. Major events, however, have one thing in common - they attract large crowds.

Factors which define major events include:

- the requirement for complex planning;
- a high profile that attracts media attention;
- a number of very distinct planning, construction and operational phases before, during and after the event is held;
- a significant and diverse range of stakeholders;
- large numbers of volunteer and inexperienced staff;
- potentially of national or international focus;
- a time-critical project;
- a broad economic impact on the local, regional, state or national economy; and
- the requirement for careful consideration and management of safety risks.

### 1.1 DUTY OF CARE OF EVENT ORGANISERS

Event organisers have a duty of care under the Victorian *Occupational Health and Safety Act 2004* (the OHS Act) to provide a safe operational environment. Under this legislation, event organisers must ensure so far as reasonably practicable that people are not exposed to risks arising from the operation; and any place where employees and self-employed persons work is safe. The definition of this duty is broad. Proactive attention by event organisers may be achieved by a process of identification, assessment and control of safety risks. In some circumstances, there may be several parties who owe a concurrent duty of care. It is important that safety is comprehensively managed and communicated by and between all relevant duty holders.

# WHAT IS A MAJOR EVENT?

## 1.2 DEFINITIONS

A risk management approach to safety at major events has been adopted. With so many risks to address, it is important for event organisers to prioritise their attentions and control the most significant risks first. Event organisers can then regularly review their risk profile - looking for additional risks that may not have been previously identified or not addressed.

An important feature of the risk management process is understanding and applying common terminology. Many of the following definitions have been taken from the *Australian Standard: Risk Management (AS/NZS 4360-2004)* and the *Australian Standard: Occupational Health and Safety Management Systems – Specification (AS 4801-2000)*.

<b>ALARP</b>	Managing risk to a level that is 'as low as reasonably practicable' (ALARP) applies the concept of risk management by treating or tolerating risk through the application of appropriate controls to a pre-determined acceptable level. Risks that are analysed as being above this level and unacceptable are terminated.
<b>CONSEQUENCE</b>	A consequence is the outcome or impact of an incident. It can be measured either in qualitative or quantitative terms. There is often more than one consequence to a specific incident. <sup>1</sup>
<b>CONTROL</b>	Policies, procedures, processes, practices or devices that minimise or eliminate risk. <sup>2</sup>
<b>CONTINUOUS IMPROVEMENT</b>	Improving the event organiser's OHS management system performance to achieve its safety objectives. <sup>3</sup>
<b>HAZARD</b>	A source of potential injury or illness; or a situation with a potential to cause injury or illness. <sup>4</sup>
<b>INCIDENT</b>	Any unplanned event that either caused or had potential to cause injury or illness. <sup>5</sup>
<b>LIKELIHOOD</b>	Uses some form of qualitative description of frequency and probability. <sup>6</sup>
<b>EVENT SAFETY MANAGEMENT SYSTEM (SMS)</b>	The event SMS contains the activities undertaken by an event organiser to manage safety. These may include the organisational structure, allocation of responsibilities, planning, policies, procedures, processes, system implementation, monitoring and review of activities aimed at achieving the event organiser's safety policy. <sup>7</sup>
<b>RESIDUAL RISK</b>	The remaining level of risk once a risk treatment measure has been applied. <sup>8</sup>
<b>SAFETY RISK</b>	The likelihood and consequence of an injury or illness occurring. <sup>9</sup>
<b>RISK MANAGEMENT</b>	The application of a systematic approach to identifying, assessing and controlling risk across the event. <sup>10</sup>
<b>RISK</b>	Risk is the chance of something happening that will impact on objectives. It is usually measured in terms of likelihood and consequence. <sup>11</sup>
<b>STAKEHOLDERS</b>	People and organisations that may affect, or be affected by, or perceive themselves to be affected by, a decision or activity that relates to an event. <sup>12</sup>

<sup>1</sup> AS/NZS 4360-2004, p.2.

<sup>2</sup> AS/NZS 4360-2004, p.2.

<sup>3</sup> AS 4801-2000, p.7.

<sup>4</sup> AS/NZS 4360-2004, p.7.

<sup>5</sup> AS 4801-2000, p.7.

<sup>6</sup> AS/NZS 4360-2004, p.3.

<sup>7</sup> AS 4801-2000, p.8.

<sup>8</sup> AS/NZS 4360-2004, p.3.

<sup>9</sup> AS4801-2000, p.8.

<sup>10</sup> AS/NZS 4360-2004, p.5.

<sup>11</sup> AS/NZS 4360-2004, p.4.

<sup>12</sup> AS/NZS 4360-1999, p.6.



# 2

## RISK MANAGEMENT AND SAFETY – THIS ADVICE IN CONTEXT

Most event organisers manage risk to some degree, however, many do not do it in a systematic way. The information contained in this guide aims to assist event organisers to take a more structured approach to managing health and safety risks. It follows the risk management process defined under the *Australian Standard: Risk Management* (AS/NZS 4360-2004). This incorporates the identification and assessment of risk, development of controls and implementation of those controls.

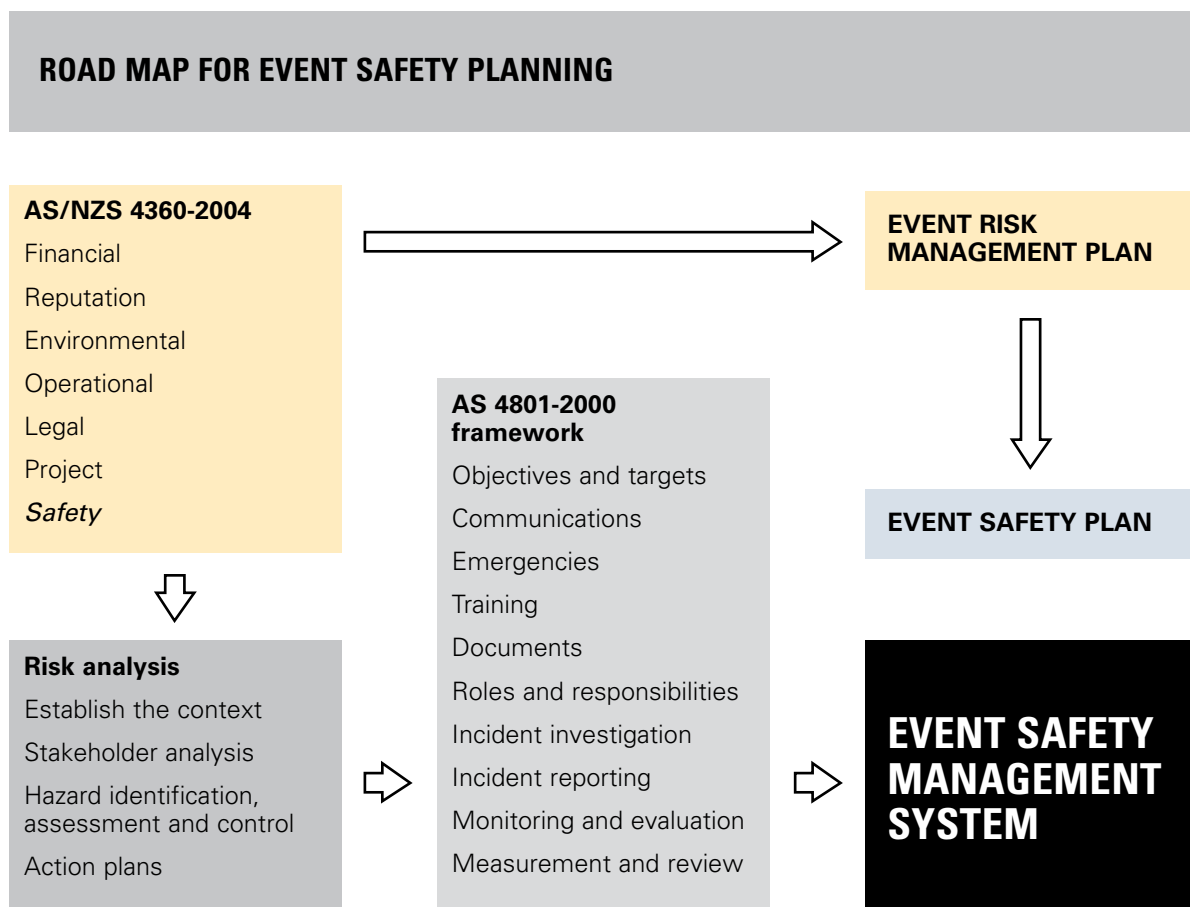
This guide also draws on the *Australian Standard: OHS Management Systems – Specification with Guidance for Use* (AS 4801-2000).

The risk management process provides a useful framework for safety-related risks. The controls are then managed through a system that encourages a proactive and co-ordinated approach to continuous improvement.

AS 4360-2004 is a suggested process for managing all sorts of business risks that affect an event - not only safety. The principles of the risk management standard enable the event organiser to identify the potential safety risks faced by the event. In industry, a risk management plan is referred to as an enterprise-wide risk management plan. For events, this is an event risk management plan. It considers all threats or opportunities to achieving an event's objectives.

AS 4801-2000 is a suggested standard used in industry for OHS management systems. It contains guidance for organising all the safety-related activities that affect a business. This Standard provides a framework for implementing the outcomes of the safety risk analysis in a structured and systematic way. Together they help the event organiser achieve their event safety policy. It is supported by a series of safety-related actions that are taken directly from the risk assessment standard. This is an event safety plan.

# RISK MANAGEMENT AND SAFETY – THIS ADVICE IN CONTEXT



## 2.1 THE RISK MANAGEMENT PROCESS

The process for developing an event SMS and event safety plan is conceptually similar to that of other areas of risk management. It reflects a structured method that:

- communicates and consults with all relevant stakeholders along the way;
- establishes the event's context;
- identifies significant safety hazards;
- analyses safety hazards in terms of likelihood and consequence considering current controls;
- evaluates the risks against a pre-determined risk criteria;
- assesses possible treatment options (controls);
- implements selected controls; and
- continually monitors and reviews the process to make any necessary changes.

The risk management process is examined in more detail later in this document.



# RISK MANAGEMENT AND SAFETY – THIS ADVICE IN CONTEXT

## 2.2 FOLLOWING THE STANDARDS

This guidance broadly follows the processes outlined in the *Australian Standard: Safety Management Systems* (AS 4801-2000) and *Australian Standard: Risk Management* (AS/NZS 4360-2004). Strategies throughout the risk management process will be explained in terms of relevance to an event organiser. The same principles can, however, be applied by suppliers to events or venue owners who host major events.

## 2.3 EVENT SAFETY MANAGEMENT SYSTEM (SMS)

### 2.3.1 General principles

An event SMS is:

- a co-ordinated and documented set of activities undertaken by an event organiser or venue owner to manage safety effectively; and
- a formalised and structured framework for the management of safety at the venue or event.

The event SMS and risk management process undertaken should assist a venue owner or event organiser to: manage health and safety risks; make operational decisions; integrate other event planning and operational processes and tasks with safety considerations; and reduce all safety risks to ALARP.

The event SMS should also form part of the overall event risk management plan and be a balanced system that supports and enhances the event by integrating safety practices into event-specific activities.

### 2.3.2 Event SMS structure

AS 4801-2000 follows the elements covered in most modern SMSs. The Standard is centred on the notion of 'continual improvement.' One of the advantages of cyclical or annual events is the capacity to learn from event-to-event and improve the standard of safety performance. One-off events, however, often do not have this luxury and are more reliant on the expertise of their event team and contractors to learn and improve from safety incidents.

The general structure of an event SMS is shown below.

<b>OHS POLICY</b>	Corporate safety policy Senior management leadership and commitment
<b>PLANNING</b>	Risk management Legal Objectives and targets OHS action plans
<b>IMPLEMENTATION</b>	Structure and responsibility Training and competency Communication, consultation and reporting Document and data control Risk management Emergency preparedness
<b>MEASUREMENT AND MANAGEMENT REVIEW</b>	Audits Debriefs

# 3

## EVENT SAFETY POLICY

Ultimately the entire event SMS should be designed to support and achieve the commitments made under the event safety policy. Like the safety policies you may be familiar with in any business, an event safety policy defines the commitment that the event organiser makes toward hosting a safe event.

### 3.1 SENIOR MANAGEMENT LEADERSHIP AND COMMITMENT

Without 100% commitment from the event's Chief Executive Officer (CEO) and other senior management, the risk management process will not be very effective.

The same applies to an event's safety culture. It may be more difficult for staff to develop a positive safety culture if the senior managers are not actively communicating and embracing the concept themselves.

If an event organiser wants the event team to have a high-quality SMS, senior management must openly and actively communicate and practice it.

#### 3.1.1 Practical examples of leadership and commitment

Practical ways in which an event's senior management can convey strong leadership and commitment include:

- ensuring adequate budget is available for addressing safety issues;
- safety items are regularly put on the agenda for discussion at senior event management meetings;
- establishing OHS performance and reporting targets for each functional area manager;
- setting specific OHS performance targets in individual functional area managers' job descriptions and employment contracts;
- ensuring safety issues are raised and discussed during event debriefs;
- checking that specific safety obligations are included in contracts of suppliers; and
- placing the highest priority on safety when making decisions, above other potentially conflicting agendas.

## 3.2 EVENT SAFETY POLICY

The event safety policy is a document that communicates the values, objectives and broad commitments of the event organiser to conducting a safe event. It represents a high level commitment by the event organiser that sets the tone for how, and to what degree, the system for managing safety will be supported.

### 3.2.1 What types of things should an event safety policy include?

Some suggested items and themes for inclusion in an event safety policy are:

- statements conveying management commitment;
- continual improvement of safety performance;
- working in consultation;
- objectives or targets for personal injury performance (e.g. number of medical treatments per 1,000 spectators);
- compliance with Victorian OHS legislation;
- a commitment toward a high level of event security;
- a reference to the safety of participants, entertainers, members of the public, event staff and contractors;
- competent and trained staff; and
- signed by the CEO.

*NB: Most event safety policies are about half a page in length. A sample policy can be found in Appendix K.*

### 3.2.2 Event safety policy communication

Once developed and signed off by the relevant senior executive, the policy must be communicated across the organisation to ensure all internal (e.g. staff) and relevant external (e.g. contractors) stakeholders are familiar with it.

### 3.2.3 Practical examples of ways to communicate the event safety policy

Some practical ways to communicate the event safety policy to relevant internal and external stakeholders include:

- placing copies of the event safety policy within all tender documentation for procurement of goods and services;
- prescribing compliance with the event safety policy, event SMS and safety plan within all contracts (for higher risk contractors, further prescription will be required within their terms and conditions of their contract);
- inserting copies of the event safety policy in staff and training manuals;
- before the event, displaying the event safety policy in visible locations throughout the event management office;
- posting highly visible copies of the event safety policy in key locations during the event for staff, contractors and workforce to notice (e.g. staff break areas, event management offices, etc.);
- referring to the event safety policy during staff and contractor inductions; and
- providing access to the event safety policy on your website.

# 4

## PLANNING AND PREPARATION

Risk management plans, event safety plans and event SMSs contain commitments made by the event organiser to the way they intend mitigating any actual or potential risks.

It is important to recognise that the event SMS and event safety plan are documented records of a process that the event organiser has undertaken. While it may be offered as evidence to verify this process, organisers should not just replicate a similar plan from a previous event, without undertaking the risk management process for the specific event in question. It is important that the contents of the plan are accurate and that what is proposed is actually delivered.

Do not undervalue the importance of consultation and communication during all parts of this process. By law, the event organiser has a duty to manage safety risks.

Regardless of whether you are planning your event for the first time, or refining plans from a previous year, this process should still be followed.

### 4.1 PREPARATION

Before commencing development of an event safety management plan and SMS, there is considerable work that must occur to set the framework. The planning phase requires a number of tasks be undertaken as outlined in sections 4.1.1 – 4.1.6.

#### 4.1.1 Appoint a safety risk manager

Nominate an individual to be custodian of the safety function to ensure the risk management process is followed. The selected person will be responsible for keeping planning, implementation, monitoring and review activities on track. The safety risk manager is not accountable for safety across the event, but is responsible for driving the risk management process.

This person needs to have a high level of understanding of the event and solid project management and communication skills. It is also desirable for this person to have had some experience in OHS to understand the risk subject areas that may apply to the event.

#### 4.1.2 Incident investigation and information gathering

Gather and review any previous incident reports and injury records in order to gain an understanding of the history of safety risks associated with the event. Be aware that while no or few incidents may have been previously recorded, this may not truly reflect what actually occurred.

#### 4.1.3 Regulatory reports

Under the OHS Act, a specified incident or dangerous occurrence must be reported to the Victorian WorkCover Authority (VWA).

# PLANNING AND PREPARATION

## 4.1.4 Information from other venues

If the event organiser does not own the venue that hosts the event, discuss the incident history of the venue with the site owner. If the event has been hosted at a different venue in the past, make contact with that venue or event organisers to gain an understanding of the history of the event and the broad risk categories you may encounter.

## 4.1.5 Risk documentation

Gather and review any relevant risk registers, risk management plans, event safety plans and event SMSs to understand how they relate to this event. These may include any risk documents developed by the venue. This will help the event organiser understand what hazard categories exist and the incident history of the event.

## 4.1.6 Internal risk planning committee/OHS committee

Establish an internal risk planning committee which could be the OHS committee.

The group should be comprised of individuals who:

- have sound operational experience at this or similar events;
- represent key internal functional areas (e.g. logistics, catering, security, cleaning and waste, entertainment, event management, etc.); and
- act for key external stakeholders (e.g. police, local council, State Government authorities, major sponsors, event insurer, etc.).

## 4.2 ESTABLISH THE CONTEXT

The next step is to establish the context within which the event SMS will operate. There are, however, many issues that you are likely to encounter that should be considered as part of establishing the context.

<b>LEGAL ISSUES</b>	Inconsistencies between regulatory bodies. Inconsistencies between industry standards. Gaining buy-in from the regulator. Contractual conditions between event organiser, venue owner and suppliers. International acceptance of Victorian safety standards.
<b>FINANCIAL ISSUES</b>	Differing quality of insurance coverage. Cost of insurance cover.
<b>PEOPLE ISSUES</b>	Transient workforces. Training costs and timing of event workforces. Discrepancies in the competency of event staff across the industry. Blame environment rather than positive safety culture. Nurturing safety cultural change. Venue familiarity of staff and spectators.
<b>COMMUNITY SUPPORT ISSUES</b>	Public perceptions of safety. Public behaviour.
<b>RESOURCING ISSUES</b>	Effective utilisation of resources. Deteriorating age and integrity of amusement structures. Resources to fund a dedicated safety person.
<b>OPERATIONAL ISSUES</b>	Striking a compromise between safety and entertainment. Stakeholder engagement in risk assessment. Maintenance responses during the event. Audit function during the event. Collection of useful safety risk data.

# PLANNING AND PREPARATION

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By applying a structured approach to establishing the context for dealing with these issues, the event organiser can determine: likely assumptions; stakeholder expectations; communication strategies with stakeholders; resourcing requirements; and the safety objectives of the event.

The key phases to be undertaken are:

- establishing the strategic (external) context of the event;
- determining the operational (internal and external) context of the event; and
- ascertaining the risk management context of the event.

The three main stages are outlined in more detail below. A worked example of establishing the context is available in Appendix F.

## 4.2.1 Establishing the strategic (external) context of the event

The strategic context of the event considers many of the long-term issues affecting the event into the future. It also considers the event's funding and provision of resources, as well as external stakeholder influences that may impact the event or, vice-versa, the event may impact upon. Much of the event organiser's analysis of the event's strategic context considers the same type of issues that you would identify in the early stages of general event planning. Relevant considerations at this point in time include those listed in sections 4.2.2 to 4.2.16.

## 4.2.2 Financial issues

Identify the event's budget and determine an estimate of the safety expenses for the event.

You need to define:

- how much money you will spend on undertaking the safety risk assessment; and
- how much you expect to spend on implementing safety controls.

Determining budget at this stage will help to define the level of analysis to be conducted when undertaking the risk assessment, i.e. whether you will perform a high level analysis or a detailed examination that considers all foreseeable risks.

While it is difficult to effectively manage all health and safety risks at an event, be aware that not having the resources to manage a risk is not a viable defence under OHS law.

Event organisers have to define what hazards are reasonably predictable and to develop practical and logical ways for dealing with such risks.

## 4.2.3 Operational (internal or external) context

Define the operational context of the event. This helps to identify broad risk categories used in the hazard identification process that we will focus on later in this document. Defining the operational context should consider:

- number of people likely to attend the event;
- location of the venue; and
- type of event.

## 4.2.4 Political context

Describe the political context, particularly if (Local or State) Government is a significant stakeholder. What would be the potential political implications should a major safety incident occur at the event? For example, if the State Government is partly funding your event, how would their reputation be affected should a major safety incident occur?

# PLANNING AND PREPARATION

## 4.2.5 Public perceptions

Define any public perceptions which may have an impact on the event. There is sometimes a difference between the perceived risk of a hazard and the actual risk. Some questions to consider are:

- does the public perceive your event as inherently unsafe, based on similar events?
- what are the implications for the safety information that you must communicate to the public?

## 4.2.6 Stakeholders

Most major events require close consultation with a broad range of external stakeholders. It is important to identify relevant stakeholders and understand their relationship to the event organiser. Developing a simple matrix that lists and categorises all identified stakeholders is a useful means of doing this. The relationship that each has with the event and the event organiser will dictate the way the event organiser communicates and consults with them.

Examples of stakeholders include the following.

EXTERNAL STAKEHOLDERS	INTERNAL STAKEHOLDERS
Government departments or agencies providing funding/management	Event staff
Patrons	Security staff
Performers	Ticketing staff
Community groups	Venue management
Police and emergency services	Board of directors
Media	Contractors/sub-contractors
Sponsors	Cleaning and waste staff
Safety regulators	Food and beverage staff

## 4.2.7 Stakeholder expectations

The safety-related expectations of each stakeholder, and that of the event organiser toward each stakeholder, vary according to this relationship. It is important to clarify expectations, as a failure to meet these can be a source of risk. For example, if a catering contractor is expected to manage the installation of the gas cylinders at their vending outlets and they do not adequately secure the bottles, this may create a hazard of an explosion. The expectations of the event organiser are that the contractor must meet their legal obligations for safe gas installations. These expectations must be communicated via contracts, on-site inductions and performance monitoring and feedback.



# PLANNING AND PREPARATION

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## 4.2.8 Stakeholder communication

The communication strategies to be adopted vary according to the type of stakeholder. Examples of different approaches to communication include:

- **Informing** – informing another party out of courtesy.
- **Consulting** – consulting with key partners whose buy-in and input is valued and important.
- **Partnership** – the stakeholder shares the responsibility and liability for major services provided at the event.
- **Controlling** – a superior (principal) and subordinate relationship exists. Often the subordinate party is a contractor under this strategy.

## 4.2.9 Organisational context

Once the strategic context of the event has been described, it sets the parameters for delving into more detail and describing the event.

## 4.2.10 Event detail

Start by documenting the following.

- What is the event? (e.g. a three-day festival with country and western music.)
- Where exactly is it being held? (Describe the venue and its location.)
- What is the contractual arrangement with the venue owner? (Is your event the exclusive hirer of the venue?)
- When is the event being held?
- When do you take-over the venue?
- Who is underwriting the event?

## 4.2.11 Organisational structure

Depict the organisational structure, including all of the functional areas being provided. Make distinctions between event staff and contractors. Define the roles and responsibilities for each of these positions.

## 4.2.12 Define event phases

Define the event phases. Major events typically have distinct phases, including:

- venue hand-over;
- bump-in;
- event operations;
- bump-out; and
- venue hand-over.

Define the periods of exclusive and non-exclusive use. When is the venue hand-over? When does bump-in and bump-out occur?

This will have an impact on the potential liabilities during each period should an injury occur. It will help define the duty of care as is being defined under establishing the risk management context.

## 4.2.13 Event safety goals and objectives

Establishing clear and measurable safety goals and objectives will help to focus your attention on the key features of the event SMS and provide a benchmark.

What are the key objectives that relate to safety? Are you intending to reduce the number of injuries sustained from those recorded in previous years? Are there other safety objectives that are measurable?

Some useful safety objectives might incorporate:

- lost time injuries;
- number of medical treatments/incidents reported;
- number of incidents reported/medical treatments required;
- number of safety audits held, compared with what was planned;
- percentage of compliance with safety audit checklists; and
- number of hazards reported and closed out.

## 4.2.14 Risk management context

Establishing the risk management context helps to define the measures against which you will assess. This starts by considering the legal context within which the event is to operate.

List the particular legislation that may impact on the way that you manage a certain risk. A list of some of the relevant legislation is included in Appendix B.

## 4.2.15 Risk assessment methodology

There is a range of risk assessment methods available, from qualitative to semi-quantitative to quantitative risk assessments. The qualitative method is the most simple to apply. It uses written descriptions and non-numerical values to rate the likelihood and probable consequences of a risk. It is, however, potentially the most subjective of these methods and quite susceptible to error.

Alternatively, the quantitative method is the most technically demanding. It relies on the assignment of numerical values of probability, exposure and/or frequency as a measure of likelihood, e.g. probability:  $10^{-3} = 1/1000 = 0.001 = 0.1\%$ . It is a time-consuming process and relies on real loss data to predict the likelihood of a risk. Unless the event organiser keeps accurate longitudinal data on the cause and nature of injury probabilities at the venue, this is not an appropriate method.

There is also a range of semi-quantitative methods. These are based on assigning numerical values, founded on a subjective decision rather than on data. In their most simple form, they are scores placed into a qualitative matrix and via a simple mathematical formula, and incorporate likelihood and consequence to produce a risk score.

The more complex and technical the nature of a safety risk problem, the more detailed the method should be.

The case studies in this guide apply a qualitative method. A copy of a simple semi-quantitative method is included in Appendix C.

## 4.2.16 Qualitative method

If using a qualitative risk assessment method, describe the levels of likelihood and consequence. Define the number of levels in each table. For example, is it a three-point, five-point or seven-point scale? See section 5.2.2 for an example of a five-point rating scale. Agree on the values of each level and determine what level is acceptable.

# PLANNING AND PREPARATION

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## 4.3 PLANNING FOR A QUALITATIVE RISK WORKSHOP

The following methodology is based on a qualitative risk assessment model. A workshop is a very effective means of brainstorming and identifying risks.

### 4.3.1 Appoint a group facilitator

A successful workshop requires the balanced input of all participants. For this to occur, a strong facilitator is required. It is important that all contributions are valued and it is not the case of 'he/she who speaks loudest gets heard.'

### 4.3.2 Relevant checklists

Locate or develop relevant checklists that would provide useful prompts for workshop participants of hazard groups. Some event-related common hazards are identified in Appendix A.

### 4.3.3 Commitment of resources

Compile a group of (four to 15) knowledgeable people to participate in the risk assessment workshop. This might consist of some of the representatives from the OHS or risk audit committee as well as other relevant parties, e.g. health and safety representatives (HSRs). Be aware that often the biggest commitment of resources for the development of event safety plans and event SMSs is people's time.

### 4.3.4 List all functional areas

Identifying hazards based on the activities of each functional area can be done by making a list of all functional areas and then systematically applying the hazard identification checklists to each hazard.

Examples of relevant functional areas are listed below.

Accreditation	Marketing
Catering	Media liaison
Cleaning and waste removal	Human resources
Promotions	Risk management
Event management	Security
Finance	Site management

### 4.3.5 Acceptability criteria

OHS legislation requires that health and safety risks must be managed. Risks need to be either eliminated or mitigated to ALARP.

# 5

## IMPLEMENTATION

The implementation phase puts into practice the majority of the risk management process. The implementation phase will carry out the method proposed in the planning phase. It will be qualitative, semi-quantitative or quantitative, as described in section 4.2.15. The process applies to all types of event risks, including safety, and sees that:

- hazards are identified;
- risks are assessed in terms of likelihood and consequence;
- risks are assessed based on the controls currently in place and the adequacy of those controls;
- risks are then evaluated against the risk acceptability criteria;
- new controls are determined;
- each risk is re-assessed in terms of likelihood and consequence to determine if there is a change; and
- the communication strategy identified in section 4.2.8 is applied.

Do not propose new controls until the risk assessment is complete.

### 5.1 HAZARD REGISTER

#### 5.1.1 Hazard register

Develop a hazard register. This can be developed in the workshop described in section 4.3.3.

RISK NO.	HAZARD/ CAUSE	RISK	OUTCOME	CURRENT CONTROL	ADEQUACY OF CONTROLS	CONSEQUENCE	LIKELIHOOD	RISK RANKING

## 5.1.2 Helpful tips

People often confuse hazards, risks and outcomes. When documenting the hazard register the facilitator should attempt to define the three separately.

<b>HAZARDS</b>	Leaking LPG cylinder Ignition source Poor atmospheric circulation in confined area
<b>RISKS</b>	Explosion Crowd crush Grandstand collapse
<b>OUTCOMES</b>	Burns Smoke inhalation Event reputation damaged Financial loss on property claim/fine

See Appendices O and P for further examples.

## 5.1.3 Define current controls

Identify the current controls that are in place to manage each identified hazard. Next determine the adequacy of those controls. There are several methods that you can use for this task, however, in the context of a qualitative risk assessment, simply define them as 'poor', 'fair' or 'good'.

When conducting the risk assessment, consider any risk that has poor controls which may increase the likelihood of the hazard or consequence of the risk.

## 5.1.4 Risk assessment

Risks now need to be assessed in terms of likelihood and consequence. Apply the categories as described in the risk management context section of this guide (see section 4.2) and plot the risk on a risk matrix.

## 5.1.5 Evaluate the risk using a risk map

Once assessed, each risk must also be evaluated. Plot the risks on a risk map to visually display the event's risk profile. You should be able to compile a prioritised list of risks. Be aware that some risks that are assessed as low likelihood and high consequence may not be ranked as highly as other risks which have less catastrophic consequences, but are more likely to occur. All risks with major or catastrophic consequences require closer examination.

If a semi-quantitative method has been applied, the calculation of a risk score will also allow for the risks to be prioritised by providing a relative ranking, i.e. the risks with higher scores should receive higher priority. See Appendix C for more detail on semi-quantitative risk assessment.

## 5.2 EVENT SAFETY PLAN

The event safety plan applies the prioritised risk assessment to a plan of action for each functional area. It becomes a working document that is used to monitor development as the event progresses from planning, to construction, to operation and through to the venue returning to its original state. It is an outcome of the risk assessment process.

## 5.2.1 Hierarchy of controls

When faced with a prioritised list of risks, the event organiser must then propose additional controls (actions) for those risks deemed to be too high. Similar to the risk identification phase, some risks will already possess controls and some controls may be inadequate. From this prioritised list, risks deemed too high or with inadequate controls may require additional controls (actions) to reduce the risks' likelihood and/or consequences. The following hierarchy of controls should be applied. The event organiser should seek additional controls that are as high up the hierarchy as possible.

<b>ELIMINATION</b>	Eliminate the risk altogether if possible, e.g. choose not to conduct pyrotechnic display because of proximity to other hazardous goods or a staging structure that significantly compromises egress.
<b>SUBSTITUTION</b>	Substitute the risk with something of less risk, e.g. conduct a lower risk laser show than pyrotechnics.
<b>MINIMISATION</b>	Minimise the exposure required to the risk, e.g. limit the spectator attendance to the event through ticket sales.
<b>ENGINEERING CONTROLS</b>	Develop an engineering solution.
<b>ADMINISTRATIVE/ PROCEDURAL CONTROLS</b>	Develop a policy and supporting procedures, e.g. require the staging contractor to submit an event safety plan or safe work method statement.
<b>TRAINING/SUPERVISION</b>	Train the staff or supervise members of the public, e.g. train ushers in emergency evacuation.
<b>PERSONAL PROTECTIVE EQUIPMENT</b>	Lowest level of the hierarchy, e.g. construction staff building the stage may require leather gloves and steel capped boots.

The best way to mitigate risks is to have several layers of control. The higher priority risks require more levels of controls. The higher up the hierarchy of controls, the more effective the result.

*NB: Control systems that are totally reliant on human intervention, e.g. administrative controls, training, supervision and the wearing of personal protective equipment, are not 100% reliable. People can and do make errors and therefore, additional higher-level controls are required for the higher risk activities.*

## 5.2.2 Evaluate control

Once controls have been proposed, revisit the risk map (Appendix C) and plot the intended changes of each risk based on: the significance of the controls proposed; their reduction of likelihood; and/or the reduction in consequence. See example below.

RISK ANALYSIS MATRIX					
Consequence					
Likelihood	1 Insignificant	2 Minor	3 Moderate	4 Major	5 Catastrophic
A Almost certain	H	H	E	6 E	E
B Likely	M	4 H	6 H	E	9 E
C Possible	L	M	M	E	E
D Unlikely	2 L	L	11 M	9 H	E
E Rare	1 L	L	L	H	H

## **5.2.3 Define the functional area**

Define which functional area is responsible for carrying out a controlling action or activity.

## **5.2.4 Define phases and responsibilities**

Determine which phase the controlling activity should occur (these phases were identified when establishing the context).

Nominate a person or position that will be responsible for carrying out each action or activity.

## **5.2.5 Event safety plan - monitoring tool**

Use the event safety plan as a monitoring tool for tracking progress. There should be a status column to update progress.

Ways of monitoring the event safety plan may include:

- regular verbal updates at meetings;
- regular written progress reports;
- place event safety plan on shared area of your intranet to allow individuals to provide updates; and
- maintain strict deadlines and link timelines to the event or project plan.

*NB: Putting the event safety plan into a spreadsheet will allow the data to be sorted by functional area, date or hazard type.*

## **5.2.6 Event SMS table of contents**

Some suggested subject headings which the event SMS could be built around are:

- pre-event planning;
- pre-event overlay build;
- event;
- entertainment/field of play (FOP);
- post-event; and
- documentation and records.

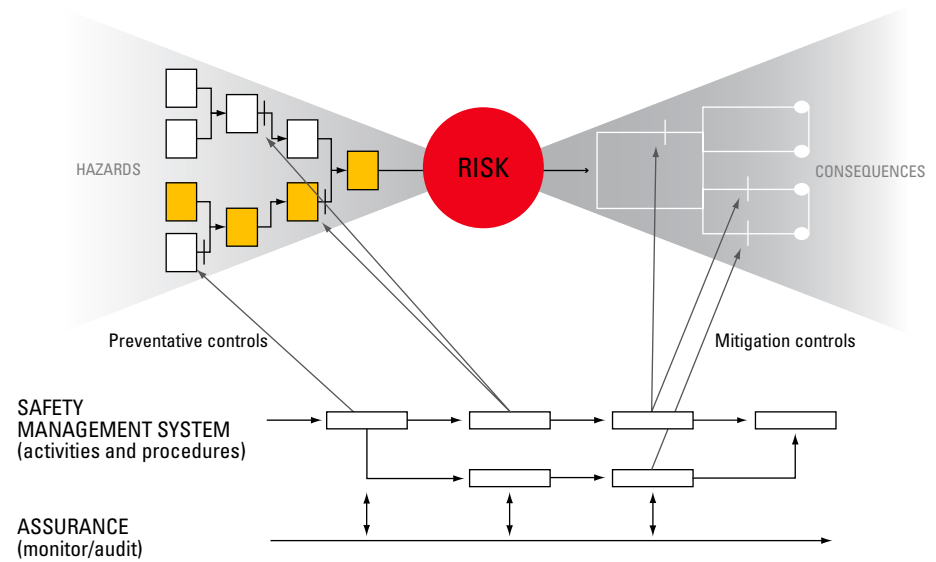
A more detailed list of proposed subject headings can be found in Appendix E.



## 5.3 BOW TIE DIAGRAMS

The bow tie diagram below shows how the event SMS and event safety audit relate to the controlling of risks. Bow tie diagrams are a useful tool for:

- 'mapping' multiple hazards that lead to an incident;
- 'mapping' multiple consequences from an incident;
- 'pinpointing' controls that mitigate hazards and consequences; and
- analysing high priority risks.



Bow tie diagrams can be applied to the highest ranking risks and those with catastrophic consequences. They can assist in ensuring you have clearly identified controls specifically for all of the hazards identified, and for all of the potential consequences.

They are also useful when building your SMS to link back to major controls and for developing the audit program for monitoring progress in implementation.

Although bow tie diagrams appear straightforward, it is important that a structured approach is taken in drawing them. For instruction on how to draw a bow tie diagram, see Appendix M.

## 5.4 EVENT SMS

As described in section 2.3, the event SMS is an organised group of activities that occur before, during and after the event to manage safety effectively. These are ideally combined into an event SMS reference manual. Some organisations have such systems linked to a database and intranet to allow internal stakeholders to access the relevant elements that relate to them.

One person might be responsible for monitoring and co-ordinating the event SMS, however, many people have responsibilities for delivering specific parts of it.

The clustering of safety-related activities into 'elements' assists in maintaining an ordered approach to safety.

There is no single event SMS list of elements. They should be clustered according to the types of risks the event may encounter.

Appendix H lists possible subject headings for an event SMS.

## 5.4.1 Training and competency

Various training and competency requirements will be identified when developing the event SMS to control specific hazards, including:

- induction requirements for staff and contractors;
- qualifications of individuals and contractors; and
- operator certificates and licences.

The OHS Act requires staff and other people under the control of the event organiser be provided with information, instruction, training and supervision to perform the work they are doing at the event in a manner that is safe and without risks to health. The event organiser should keep evidence (i.e. training records) that such training has occurred.

## 5.4.2 Emergency procedures

It is vital that organisers have in place emergency evacuation and response procedures as major events generally involve large crowds which could be seriously affected by a major incident. The emergency procedures must be:

- specific to the event;
- up to date; and
- well rehearsed.

Event organisers are urged to develop their emergency procedures using the following industry standards:

- *Emergency Management for Public Venues Guidelines, Emergency Management Australia, 2004*; and
- *Australian Standard: Emergency Control Organisation and Procedures for Building, Structures and Workplaces (AS 3745-2002)*.

## 5.4.3 Incident reporting and investigation

Incident reporting systems form an important mechanism for understanding the hazards occurring in the venue and the injuries that have resulted. Information regarding an incident must be collected in an accurate and timely manner after it has occurred. The importance of reporting incidents to event staff should be reinforced. The more information provided by staff, the better placed the event organiser will be to:

- identify incident/near-miss trends;
- mitigate similar hazards across the venue;
- initiate maintenance requests;
- detect reportable incidents under OHS legislation; and
- initiate claims management strategies in the event that an incident has occurred.

## 5.4.4 Information gathering

Event staff are the 'eyes and ears' of the incident reporting system. All staff should be provided with a simple to use system that encourages reporting of incidents and near-misses. Some examples of such systems might include:

- incident reporting forms to be completed by staff during the event;
- telephone hotlines for reporting of incidents;
- radio control room logs of all incidents and near-misses;
- medical logs; and
- security incident logs.

For events where the incident reporting system is poor, often the first an event organiser will hear of an incident is when receiving notice of potential action from the relevant government authority or a civil action claimant's lawyer. This is difficult to defend when no information has been previously recorded.

## 5.4.5 Monitoring incidents

Monitoring incidents throughout the event is crucial to determine if trends are developing. This is particularly important for large multi-day and multi-venue events. Some large events have dedicated safety officers to investigate incidents and report them immediately to a central location.

Some major events also develop risk information management systems to handle large volumes of incident data. The key is ensuring that the information is collected and analysed within 24 hours or sooner so as trends develop, something can be done to rectify the problem.

## 5.5 CONTRACTOR MANAGEMENT

Most major events engage contractors to provide a broad range of goods and services including:

- food and beverages;
- security;
- construction and site management;
- lighting and public address;
- ticketing; and
- broadcast.

Contractors provide an important function in the operation of the event. While the event organiser may outsource some or many of these roles to transfer some of the liability risk, the duty of care under the OHS Act is non-transferable. It is therefore a requirement of event organisers to have good systems in place to manage the 'life-cycle' of contractors.

The term 'life-cycle' implies considerations of the selection and management phases of the contractors' engagement.

Key considerations when engaging contractors are outlined in section 5.5.1.

## 5.5.1 Contractor selection phase

When considering outsourcing a service to a contractor, the following should be included in your review.

<b>PREVIOUS PERFORMANCE</b>	Check the history of the contractor: what relevant experience do they have and how did they perform?
<b>QUALIFICATIONS</b>	Are they qualified and competent to deliver the tasks they're engaged to deliver?
<b>COMMITMENT TO SAFETY</b>	Can the proposed contractor demonstrate commitment to safety? <ul style="list-style-type: none"><li>• Do they have a safety management plan?</li><li>• What is their injury record?</li><li>• Has their safety plan been audited?</li><li>• What were the results?</li></ul>
<b>COST</b>	Cost is an important consideration, however, all of the factors discussed in this section should be part of the evaluation criteria. The appointment of contractors purely on cost can lead to unsafe work practices. The result is that the event organiser may have increased liability exposure to fines, penalties and prosecutions from the expected lower safety standards of the contractor.
<b>INDUSTRY STANDARDS</b>	What are the standard safety practices in the industry? e.g. Is a request for safe work method statements common for sound riggers at a concert?
<b>INSURANCES</b>	Do they carry appropriate workers compensation and public liability insurance?
<b>UNDERSTANDING THE TASK</b>	Can the contractor demonstrate that they understand the tasks required and can they do so safely? Depending on the nature of the work, this may require the contractor to submit a safety plan or safe work method statement.
<b>SUB-CONTRACTORS</b>	Does the contractor intend on sub-contracting some of the functions? If so: <ul style="list-style-type: none"><li>• What are the qualifications of the sub-contractors?</li><li>• Have they provided job safety analyses?</li><li>• Have they received any safety training?</li></ul>

## 5.5.2 Contractor management phase

Many industries, apart from events, have useful resources and tools for which event organisers can adopt in managing contractors. For example, the construction industry has useful contractor management systems, as do the hospitality and security industries.

Once a contractor has been engaged, the following should be considered.

<b>A STAFF INDUCTION/ KICK-OFF MEETING</b>	To familiarise the contractor with site rules, emergency procedures and hazards that may affect them.
<b>EXPECTATIONS</b>	Ensure the contractor is clearly briefed of the event organiser's expectations in relation to safety.
<b>TIMELINES</b>	Clearly identify the timelines to which they must comply - particularly those that have a potential impact between event phases (e.g. from construction to operations).
<b>PERMITS TO WORK</b>	A good way to control the movement of contractors on and off the venue is to arrange a permit to work program. The contractor must be issued a 'permit to work' by the event organiser before activity can commence. This system is often used for particularly hazardous work, such as confined spaces or with hot work e.g. welding.
<b>SUPERVISION</b>	Contractors must be supervised to ensure that they supply their goods or services in a safe manner.
<b>AUDIT</b>	Depending on the nature of work being undertaken by the contractor, it may be of value to audit the contractor. If the contractor was required by you to demonstrate safe systems of work, then an audit should be conducted against the controls that they have documented.
<b>MAINTAIN ABILITY TO ACT</b>	The event organiser should consider practical ways of maintaining the ability to take action against contractors who breach their contractual conditions that relate to safety.

## 5.5.3 Post event review

At the completion of the event, the organiser should review the performance of the contractor and take the necessary action before re-appointment for the following event.

## 5.6 MONITORING AND ASSESSMENT

### 5.6.1 Auditing

Auditing is one of the key monitoring functions for ensuring the controls that are supposed to be mitigating risks are indeed effective. They also can be used to check more broadly the activities undertaken within the event SMS to ensure adequacy and effectiveness.

### 5.6.2 Who conducts audits?

Typically the event safety manager, along with HSRs, conducts the audit. However, the manager of each functional area is responsible for ensuring that:

- the audit is undertaken within their area of responsibility;
- the relevant people are available to participate;
- participants take the process seriously and understand the need to undertake it; and
- findings and recommendations are acted on.

### 5.6.3 Monitoring of the plan

What happens if issues arise or controls are not implemented or effective?

- A corrective action plan is developed to address immediate issues.
- The corrective action is prioritised and monitored for implementation.

## 5.7 EVENT SMS DOCUMENTATION

Documentation is a key feature of an event SMS. In the same way that quality and environmental management systems require a documented framework, so too does the event SMS.

The documentation that supports an event SMS should cascade down from the event safety policy, i.e. the SMS documentation is designed to assist the organisation achieve the commitments made in the event safety policy.

### 5.7.1 Risk management plan

An event SMS manual forms part of the overall risk management plan.

It should contain an event safety plan that provides a list of actions which determine the controls to address various safety risks at the event.

The event safety plan should also include a hazard register.

# 6

## MONITORING THE SAFETY MANAGEMENT SYSTEM

Monitoring of the event SMS ensures that the controls (actions) being undertaken to address risks are effective, and that the controls are actually being carried out. Monitoring should also determine whether any additional risks have become apparent. Monitoring activities should occur in planning the event, during the event and post event.

### 6.1 IN PLANNING

#### 6.1.1 Event safety plan

As noted earlier, the event safety plan is a working document. It should be closely monitored and stakeholders with actions or activities should be required to report to event management on their progress.

If other project planning systems (e.g. Gantt charts and event plans) are used, the safety objectives, targets and milestones can be incorporated into the main event project planning system to ensure that safety activities are integrated within normal planning processes.

### 6.2 DURING THE EVENT

#### 6.2.1 Investigate incidents

One of the most useful tools for fostering continuous improvement in the event SMS is to investigate incidents thoroughly. This should happen as soon as possible to the time that the incident occurs. Some event organisers have a dedicated resource for responding to and investigating such incidents as they occur.

Important information can be gained from assessing the following factors.

- Immediate causes of an incident:
  - unsafe work practices (e.g. driving a car without a seat belt); and
  - physical hazards and conditions (e.g. gas cylinders unchained).
- Basic causes of an incident:
  - personal factors (e.g. knowledge, information, skills and abilities); and
  - job or venue environment reasons (e.g. poor work standards, tools and crowd flow design).

#### 6.2.2 Develop a risk information management system

If useful data is collected on incidents reported, it would be constructive to collate and manage that information to allow it to be analysed for trends and retrieval of specific incident information. Developing or purchasing a risk information management system can do this.

Such a system can also be useful for recording hazards during the event.



# MONITORING THE SAFETY MANAGEMENT SYSTEM

## 6.2.3 Develop an audit program

Audits should focus on two areas:

- where there is a perceived risk, to find more information during the event; and
- where significant changes have been made to some area of operations and a check is needed to ensure it is effective.

From the event SMS, develop the following items.

<b>AN AUDIT PROTOCOL</b>	This is a series of questions that seek evidence to verify and assure that the SMS is being implemented effectively. Typically such audits will occur during the construction and event operational phases. This should also include auditing the event safety plan.
<b>AUDIT CHECKLISTS</b>	Checklists which are either: <ul style="list-style-type: none"><li>• specific to a space within a venue that are used to verify specific safety issues have been considered; or</li><li>• generic across the entire venue and used as prompts where marking the checklist might be by exception, rather than to verify that all points are addressed (as in a site specific checklist).</li></ul>
<b>AUDIT SCHEDULE</b>	Nominate an independent party to undertake an audit. It is difficult to audit every element and sub-element of the event SMS prior to, during and after the event, however, the auditor should attempt to seek a 'snapshot.' For example, an auditor may want to review training records or certificates of competence of a contractor that may have been claimed by the contractor to win the work.
<b>AUDITS AND INSPECTIONS</b>	There is common confusion between what is an inspection and an audit. An inspection is a brief walk around the venue to spot hazards. Inspections are sometimes conducted immediately prior to an event as in checking for 'operational readiness'. An audit is a detailed inspection that not only looks for hazards, but also attempts to identify event SMS failures against predetermined and documented criteria that may have caused the hazard.

## 6.2.4 During the event

During the event the auditor should observe work practices, crowd safety issues and identify physical hazards. The event organiser and auditor should be able to:

- agree on the means of reporting – ensure that event management and the auditor have agreed on the means of reporting safety breaches and the format of the report. If major breaches are identified, event management should require immediate notice;
- agree on the means of corrective action and timelines for the completion of the report; and
- notify functional areas and contractors of the impending audit. All functional areas and contractors should be notified in advance that they might be audited during the event.

# MONITORING THE SAFETY MANAGEMENT SYSTEM

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## 6.3 POST THE EVENT

Following a major event, staff and contractors sometimes 'drop the ball' when it comes to safety. This can result from:

- staff feeling physically and mentally fatigued;
- the venue may need to be returned to its existing environment quickly;
- construction activities occur simultaneously with the crowd exiting, or crowds from another event are in the same vicinity (e.g. the football crowd from the MCG in the same area as the set-up/pack down for a concert at Melbourne Park);
- no bump-out plan is in place;
- many contractors recovering equipment simultaneously;
- no close supervision of contractors; and
- no post event penalties for contractors operating in an unsafe manner.

It is essential to audit this phase of the event as well.

## 6.4 MAKING CHANGES

Most risks change from time to time. As you move through the risk management process, you may find that parts of your operational plan have altered and, therefore, the event safety plan may have to change accordingly. At any stage, you may wish to go back and make some adjustments.

For example, you may reach the end of the risk assessment and a hazard appears that was not previously considered. It may be included in the hazard register and re-assessed. If assessed as 'high', this may have an impact on the other top priority risks.

All phases of the risk management process can be subject to change.

# 7

# REVIEW

At the completion of each major event, there should be a review of its operations to identify problems and celebrate successes. The same applies to safety. The information gathered during the monitoring phase needs to be analysed to determine what improvements can be made to the event SMS for the next event.

## 7.1 FUNCTIONAL AREA DEBRIEF

As part of this review process, a formal debrief should be conducted with consideration given to receiving feedback on major safety issues from each functional area. This should cover:

- hazards identified;
- incidents/injuries reported; and
- other safety issues encountered.

## 7.2 OTHER DATA TO REVIEW

There are many sources of useful data that are worthwhile reviewing, including:

- maintenance records of hazards recorded that may be preventable in the future;
- incidents reported;
- medical treatment records; and
- control room security logs.

This information should be summarised with key learning points identified and incorporated into the hazard register and event safety plan for future events.

## 7.3 SAFETY AUDIT RESULTS

The event safety audit report can provide a useful insight into progress of implementation of the event SMS and event safety plan.

Provide the relevant feedback to each respective functional area on the audit findings.

Ensure it is a balanced account of the audit results and doesn't just highlight all the negatives.

## 7.4 PERFORMANCE TARGETS AND OBJECTIVES

Revisit the set safety goals and objectives (as discussed in section 4.2.13) and determine whether they have been met. If they have not been met, analyse why not.

During the annual performance review of staff, it should be determined whether individual performance targets and objectives have been achieved.

## 7.5 CONTINUAL IMPROVEMENT

The outcomes of the review should be fed back into the event safety plan to ensure continual improvement. This is one of the key features of the event SMS.

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# APPENDIX A – EXAMPLES OF HAZARDS

The following checklist items are not exhaustive. They can be used as a prompt in hazard identification workshops.

## Security

- Weapons
- Explosives
- Bomb threats
- Magnetometer and bag checks
- Public perception
- Restricted items
- Cloaking
- Cash handling
- Confiscation

## People

- Security staff numbers
- Patron demographics
- Inappropriate use of staff
- Alcohol
- Serial pests
- Training/induction
- Lack of relevant certification/licences
- Backgrounds checks of staff
- Cultural issues

## Plant

- Training
- Certification
- Supervision
- Maintenance
- Isolation/segregation – people
- Hand tools
- Registered plant, e.g. lifts, escalators and pressure vessels

## Hazardous Substances/ Dangerous Goods

- Pesticides
- Fuel storage
- Cleaning products
- Water/waste water
- Pyrotechnics
- Fire arms and ammunition
- Asbestos
- Inappropriate labelling
- Poisons
- Acids

## The event

- Track invasion
- Communication equipment
- Asset protection
- Access controls for volunteers
- Entry control

## Legal

- Overuse of security powers
- Interaction with law enforcement agencies
- Lack of legal compliance
- Unsolicited acts of violence

## Planning

- Poor interface with stakeholder
- Lack of confidentiality of security plans
- Possible acts of terrorism
- Emergency management
- Contingency planning
- Surveillance

## Accessibility

- Lifts
- Ramps
- Parking
- Public transport
- Signage
- Access to venues
- Egress
- Seating

## Materials handling

- Mechanical handling
- Plant
- Food handling
- Furniture fixture and equipment
- Venue design
- Functionality
- Transport between venues/locations/storage
- Excess weight and height
- Condition of terrain

## Field of play (FOP)/equipment

- Proximity of audience to FOP
- Officials
- Throwing objects on to FOP
- Sport projectile
- Appropriate activity for venue
- Traffic management
- Safe crossing
- Promotion activities without consideration of safety issues
- Patron management
- Overloading venue
- Mosh pits
- Appropriateness of signage
- Access to FOP for entertainment
- Weather
- Cameras and equipment
- Emergency egress
- Crowd communication
- Crowd invasion
- FOP regulations (e.g. international federations)
- Exclusion zones

## Contractors

- Co-ordinating contractors
- Communication expectations
- Legal compliance
- Historic standards
- Job safety analysis
- Sub-contractor
- Casual labour
- Training
- Induction
- Accreditation
- Contracts
- Competence
- Management – no monitoring/supervision
- Plant and equipment

# APPENDIX A – EXAMPLES OF HAZARDS

## Vehicle safety

- Maintenance
- Security of vehicles
- Vehicle/people segregation
- Speed
- Refuelling
- Parking supervision
- Lack of training
- Permits and certification/licensing
- Outdoor broadcast vehicles
- Working at height
- Electrical safety
- Slips and trips
- Inappropriate use of paths
- Accessibility during emergency management
- Loading operations – docks and people

## Staff

- First aid
- Food preparation
- Fatigue
- Conditions – excessive heat/cold
- Competency/suitability
- Working alone
- Confined spaces
- Violence/bullying
- Welfare – breaks, sunscreen, dehydration, etc
- Cultural issues
- Transport

## Working at height

- Scissors lifts
- Safety harness
- Scaffold
- Abseiling
- Winches
- Ladders
- Overhead power lines
- Edge protection
- Camera platforms
- Rigging/lighting

## Slips and trips

- Electrical cables
- Uneven ground, loose surfaces
- Weather
- Flooring design/surfaces
- Design of barriers
- Lighting
- Outdoor event
- Queuing systems
- Edge protection
- Climbing for vantage points
- Inappropriate footwear

## Electrical safety

- Qualification of contractors
- Power supply – no spiking, lack of continuity
- Overloading systems
- Power tools
- Faulty insulation
- Underground services
- Protection of leads
- Cables/height/pathways
- Location in relation to other equipment

## Construction

- Working at heights
- Temporary structures
- Unauthorised access
- Maintaining public access
- Plant
- Council/building code approval
- Electrical safety
- Slips/trips
- Interface operations
- Weather
- Co-ordinating sub-contractors
- Contractor management

## Fire safety

- Evacuation plans
- Fire prevention plan

- Dangerous Goods storage
- Knowledge and use of equipment
- Appropriate fire fighting equipment
- Obstruction and security of fire fighting equipment
- Pyrotechnics
- Warning and communication system
- Fire ban days
- Policies and procedures

## Manual handling

- Excessive weight
- Mechanical aids
- Suppliers' packaging
- Loading/unloading reefers
- Excited volunteers
- Carrying
- Time lines
- Lack of staff
- Crowd control – security logistical planning
- Training

# APPENDIX B – RELEVANT VICTORIAN LEGISLATION

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## **Event organisers should familiarise themselves with relevant legislation including the following.**

*Accident Compensation (WorkCover Insurance) Act 1993*  
*Australian Dangerous Goods Code 1998*  
*Dangerous Goods Act 1985*  
*Dangerous Goods (Explosives) Regulations 2000*  
*Dangerous Goods (Storage and Handling) Regulations 2000*  
*Electricity Safety Act 1998*  
*Equipment (Public Safety) Act 1994*  
*Firearms Act 1996*  
*Food Act 1984*  
*Gas Safety Act 1997*  
*Health Act 1958*  
*Occupational Health and Safety Act 2004*  
*Occupational Health and Safety (Asbestos) Regulations 2003*  
*Occupational Health and Safety (Certification of Plant Users and Operators) Regulations 1994*  
*Occupational Health and Safety (Prevention of Falls) Regulations 2003*  
*Occupational Health and Safety (Plant) Regulations 1995*  
*Occupational Health and Safety (Noise) Regulations, 2004*  
*Occupational Health and Safety (Manual Handling) Regulations 1999*  
*Occupational Health and Safety (Lead) Regulations 2000*  
*Occupational Health and Safety (Issue Resolution) Regulations 1999*  
*Occupational Health and Safety (Confined Spaces) Regulations 1996*  
*Occupational Health and Safety (Hazardous Substances) Regulations 1999*  
*Private Agents Act 1966:*  
(I) A Security Firm's Licence; or  
(II) A Security Guard's Licence; or  
(III) A Crowd Controller's Licence  
*Road Safety Act 1986*  
*Road Transport Reform (Dangerous Goods) Act 1995*  
*Road Transport Reform (Dangerous Goods) Regulations 1997*  
*Tobacco Act 1987*

## **Specific event legislation**

*Australian Grands Prix Act 1994*  
*Commonwealth Games Arrangements Act 2001*  
*Cultural and Recreational Lands Act 1963*

## **Other relevant legislation**

*Sports Drug Testing Act 1995*  
*Terrorism (Commonwealth Powers) Act 2003*  
*Terrorism (Community Protection) Act 2003*  
*Terrorism (Community Protection) Regulations 2004*

# APPENDIX C – SEMI-QUANTITATIVE RISK ASSESSMENT

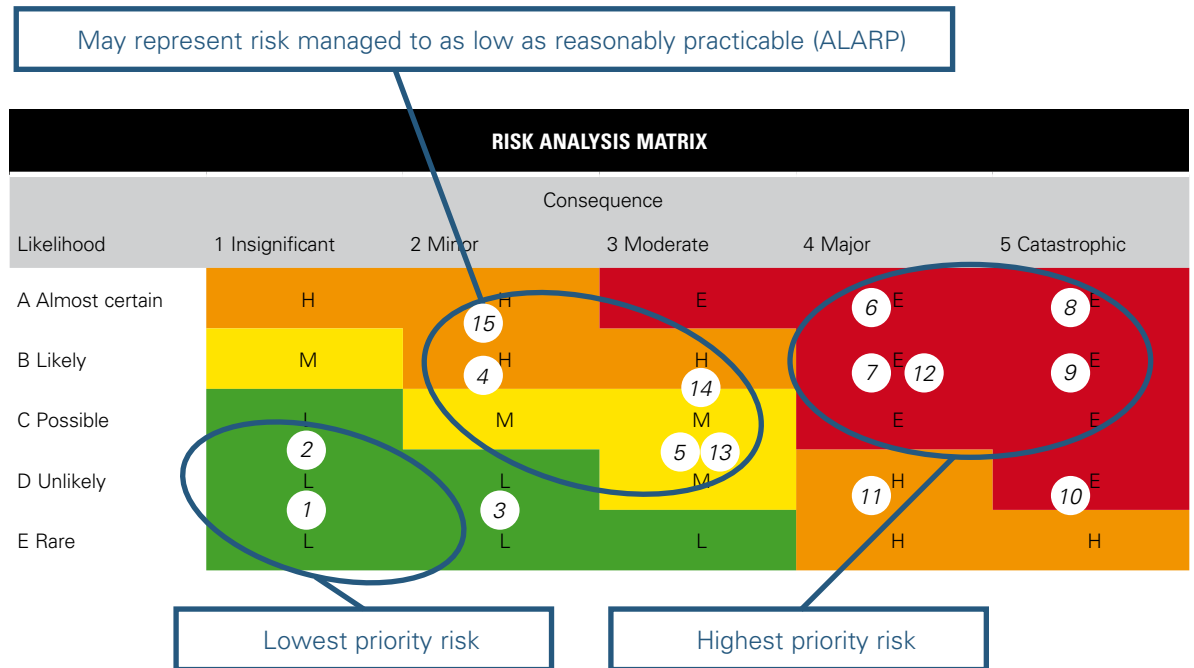
Semi-quantitative risk assessment (SQRA) is a method that combines the robustness of quantitative risk assessment with the simplicity of qualitative risk assessment. It allows for the assignment of numerical values for likelihood and consequence and for the ranking of risks in order of priority.

There are many methods of SQRA. The main aim is, however, to define a relative risk ranking for each risk.

Care must be taken as the value allocated to the description of each risk does not necessarily reflect the true magnitude of the risk, but rather reflects the relativities of likelihood and consequence for each.

An example semi-quantitative formula is:

Likelihood x consequence = risk score



Further consideration can be given to incorporate adequacy of controls:

$$\frac{\text{Likelihood} \times \text{consequences}}{\text{Adequacy of controls}}$$

Assign a value of adequacy of controls, e.g. Good = 1, Fair = 0.75, Poor = 0.5

This formula allows for the relative risk score to increase for inadequate controls. Other more sophisticated forms of SQRA exist.

Risk management consultants should be engaged if attempting a more sophisticated method. When performed correctly, more complex methods of SQRA can provide a much greater level of accuracy and informative result than what is achieved from the formula above.

However, great care must be taken in the selection of method for the event being analysed. Sophisticated forms of SQRA are useful for events where there is a large amount of overlay construction, and the event, along with the event activity (field of play or entertainment), is potentially hazardous.



# APPENDIX D – SELF-AUDIT QUESTIONS CHECKLIST

This section provides a sample self-audit questionnaire template relating to an event safety policy. The template is broken up in to six categories as described below.

- Objective - a description of the objective of the event safety policy.
- Guideline - a guideline to help the auditor understand the objective.
- Evidence - the type of evidence the auditor would look for and its corresponding score, i.e. 'A' equates to exceptional and 'E' represents poor.
- Questions – the questions that the auditor would ask to determine if the controls exist.
- Comments – any comments that the auditor may wish to add.
- Recommendations – any recommendations they may make.

<b>OBJECTIVE</b>	Event staff, contractors and volunteers should be aware of the event safety policy. They should also be able describe a location where it can be found.
<b>GUIDELINE</b>	Effective leadership is vital to the success of event safety. The event’s safety policy reflects the event organiser’s positive attitude and commitment toward OHS. The senior manager of the event organiser should ensure that the policy is communicated to all relevant staff, contractors and volunteers.
<b>EVIDENCE</b>	<p><b>A</b> All staff are familiar with the event safety policy and can describe the content in some detail. The policy is displayed in prominent back of house locations and can be easily viewed by staff there and via direct links on the intranet, or in hard copy.</p> <p><b>B</b> All staff are familiar with the event safety policy and can describe how the content applies to their own position. The policy is displayed, but not in a prominent position. It can, however, be viewed via direct links on the intranet, or in hard copy.</p> <p><b>C</b> Only some staff members are familiar with the event safety policy. Staff interviewed can describe its intent, but not in detail. The intranet or hard copy document can be found without too much difficulty.</p> <p><b>D</b> Staff are only vaguely aware of the event safety policy, but cannot readily locate the document. The version of the OHS policy and guide held is out-of-date.</p> <p><b>E</b> Staff have not heard of the event safety policy. The policy is not available anywhere within the back of house areas.</p>

QUESTIONS	RATING
Are staff familiar with the event safety policy?	
Can they describe its detail, or at minimum its intent?	
Is the event safety policy displayed in a prominent place in back of house areas?	

**COMMENTS**

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**RECOMMENDATIONS**

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# **APPENDIX E – EXAMPLE – TABLE OF CONTENTS FOR AN EVENT SMS**

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## **Pre-event planning**

- Safety policy
- Consultation
- Safety risk planning
- Event safety plan - safety risk identification assessment and control
- Regulations and permits to operate
- Organisational structure and responsibility
- Training
- Communications and promotions
- Documentation and records
- Security
- Contractor management
- Emergency preparedness
- Design and construction

## **Pre-event overlay build**

- Safety risk identification assessment and control
- Communications and consultation
- Security
- Event operations
- Crowd management
- Construction
- Contractor management
- Traffic management
- Consultation

## **Event**

- Entertainment/field of play
- Crowd management
- Security
- Documentation and records
- Event operations
- Inspection and testing
- Contractor management
- Management of change
- Incident investigation
- Monitoring and assessment
- System audits and management review

## **Post-event**

- Documentation and records
- Security
- Contractor management
- Management of change
- Incident investigation
- Monitoring and assessment
- System audits and management review

# APPENDIX F – EXAMPLE – ESTABLISHING CONTEXT

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## MELBOURNE INTERNATIONAL OUTDOOR HOME RENOVATORS' FESTIVAL

### Event Safety Management System

#### ***Strategic context***

#### ***Financial***

The budget is in the order of \$15 million.

The event is owned by the International Event Management Group Pty Ltd and is primarily aimed at profiling the industry.

#### ***Operational context***

'Show Tell Sell'

#### ***Political context***

Hallmark event. Part of State Government tourism strategy.

International significance.

Located on City of Melbourne grounds.

Event advisory group. Commercialisation of public park venue.

Local residents affected by noise, traffic and transport diversion. Also lose use of parkland.

City of Melbourne and State Government sponsorship (value in kind and cash).

#### ***Public perception***

Local residents – may have concerns with event in 'own backyard'.

One of only two events that cater for both older and younger members of the community. There is a lot of public support, as is evident by regular letters and emails to local TV networks following home renovation programs and advertising.

#### ***Cultural***

Cultural event.

Alternative to sporting events – mainstream market.

Appealing to groups that may not have been catered for.

#### ***Legal***

Potential public liability exposures

*Occupational Health and Safety Act 2004*

*Dangerous Goods Act 1985*

*Road Safety Act 1986*

*Food Safety Act*

*1996 Building Code of Australia*

# APPENDIX F – EXAMPLE – ESTABLISHING CONTEXT

## MELBOURNE INTERNATIONAL OUTDOOR HOME RENOVATORS' FESTIVAL

### Event Safety Management System (SMS)

#### *Organisational context*

An outdoor home renovations festival.  
Carlton Gardens and Royal Exhibition Building.  
27-30 April.  
Ticketed event over five days.  
Gardens closed to public.  
Run by International Event Management Pty Ltd.  
More than 300 exhibitors.  
Approximately 125,000 patrons attending.

#### *Event management team organisational structure*



#### *Event mission*

To bring home renovators and suppliers together to help people achieve their housing dreams.

#### *Event objectives*

1. To provide a safe and successful, high profile event for all stakeholders.
2. To comply with all relevant legislative requirements.
3. To achieve a sound commercial return on our investment.
4. To provide economic benefit to the State of Victoria.

#### *Event safety policy*

See Appendix K for an example of an event safety policy.

# APPENDIX F – EXAMPLE – ESTABLISHING CONTEXT

## MELBOURNE INTERNATIONAL OUTDOOR HOME RENOVATORS' FESTIVAL EVENT SAFETY MANAGEMENT SYSTEM

### RISK MANAGEMENT CONTEXT

#### Risk assessment definitions

#### CONSEQUENCE RATING SCALE

LEVEL	DESCRIPTOR	DESCRIPTION
1	Insignificant	No injuries, no negative media attention, no legal action.
2	Minor	Minor injuries requiring first aid, reported in local media, warnings from VWA, unsuccessful civil liability action.
3	Moderate	Major injury or multiple minor injuries from one incident requiring medical treatment by doctor (not event-related), reported in Melbourne media, prohibition notice served by VWA, successful civil liability action <\$5,000.
4	Major	Major injury/ies requiring hospitalisation from event-related accident, single fatality, reported in national media, VWA prosecution \$5,000-\$50,000, successful civil liability action \$5,000-\$50,000.
5	Catastrophic	Multiple fatalities, ongoing national or international media attention, VWA prosecution >\$50,000-jail terms, successful civil liability action >\$50,000.

#### LIKELIHOOD RATING (FREQUENCY)

LEVEL	DESCRIPTOR	DESCRIPTION
5	Happens regularly	Incident it is expected to occur >10/year.
4	Happens often	Incident is expected between 2-10/year.
3	Happens occasionally	Incident may occur 1/year.
2	Happens very occasionally	Incident may occur <1 - >0.2/year (less than once/year and greater than once/5 years).
1	Happens rarely	Incident occurs < 0.2/years (less than once/5 years).

# APPENDIX F – EXAMPLE – ESTABLISHING CONTEXT

RISK ANALYSIS MATRIX					
Likelihood	Consequence				
	1 Insignificant	2 Minor	3 Moderate	4 Major	5 Catastrophic
A Almost certain	H	H	E	E	E
B Likely	M	H	H	E	E
C Possible	L	M	M	E	E
D Unlikely	L	L	M	H	E
E Rare	L	L	L	H	H

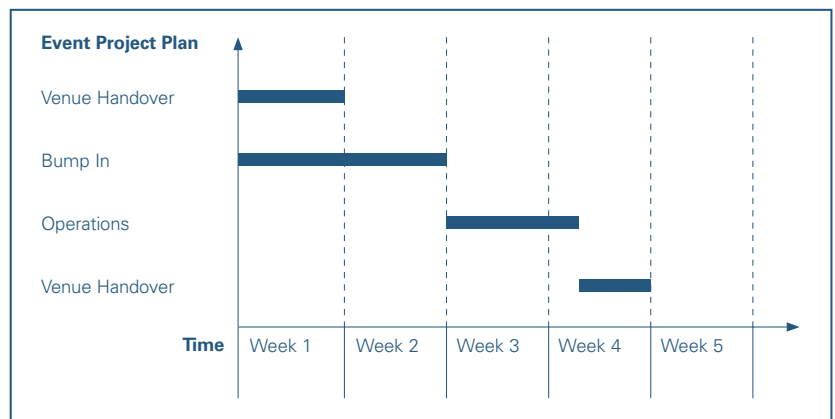
### Acceptable criteria

Apply industry standards (Australian Standards).  
 Manage risk to as low as reasonably practicable (ALARP).

Tolerate medium-low risk

### Event phases

- Planning
- Venue hand-over
- Bump-in (14 days)
- Operations (5 days)
- Bump-out (5 days)
- Venue hand-over
- Evaluation



### Define methodology

In the absence of useful data from previous years, a qualitative risk assessment methodology will apply.

### Establish assumptions

Risk assessments will be based on the most likely consequence rather than the worst possible scenario.

# APPENDIX G – EXAMPLE – EVENT SAFETY PLAN

(NB: This is neither a detailed nor exhaustive list of risks or controls.)

## GARDEN SHOW AT AN INDOOR CONVENTION CENTRE

RISK NO	RISK	CONTROLS	PHASE	FUNCTION AREA RESPONSIBLE	DUE DATE
10	Slips, trips, falls	Design of pathways and walkways to ensure that no access issues arise – sign-off from disability consultants.	Planning	Event management	
6		Final build inspections prior to opening.	Bump-in	Event management	
2		Exhibit checklists/event manual work instructions.	Event/daily	Exhibitors	
4		Superintendents as roving safety inspectors.	Event/daily	Venue management	
11		Building inspections on site prior to event.	Event/daily	Venue management	
39		Maintenance personnel on standby during event.	Event/daily	Event management	
4		Regulatory inspections.	Bump-in/ event	Regulators	
30	Theft	Victoria Police on site.	Event/daily	Security	
2		Security personnel.	Event/daily	Security	
22		Announcements and signage.	Event/daily	Public liaison Site management	
32		Safe storage areas for valuables.	Bump-in	Spectator services	
54		Advertising on tickets, in event program.	Planning	Ticketing	
3	Falls from height	Safe work methods/job safety analysis from all contractors.	Bump-in	Site management Contract supervisors	
32		Inspection of safe work methods/job safety analysis and auditing against these standards.	Bump-in	Site management Contract supervisor	
23		Regulatory inspections.	Bump-in	Safety officer	
40		Design of permanent structures in line with building codes.	Planning	Site management	
14		Superintendents supervising with safety responsibilities/job description.	Bump-in	Contract managers	
17	Heavy plant and equipment	Checking of operator licences.	Bump-in	Site management	
19		Safe work methods/job safety analysis from all contractors.	Planning	Site management Contract supervisor	
26		Inspection of safe work methods/job safety analysis and auditing against standards.	Bump-in	Site management Safety officer Contract supervisor	
31		Exclusion of use of heavy equipment during event hours (contractual condition).	Event/daily	Legal section Site management	
34		Use of spotters on site during operation.	Bump-in	Site management Event management	

## APPENDIX G – EXAMPLE – EVENT SAFETY PLAN

RISK NO	RISK	CONTROLS	PHASE	FUNCTION AREA RESPONSIBLE	DUE DATE
37		Vetting of equipment on site.	Planning	Site management Event management	
38		Training of event management personnel in equipment use.	Planning	Human resources	
3	Food poisoning	Food safety plan requirements.	Planning	Catering	
13		Safe food handling accreditation/training requirements.	Planning	Catering Human resources	
49		Regulatory inspections.	Event/daily	Catering Department of Health	
48		Licensing checks/verification.	Planning	Department of Health	
26		Food safety restrictions.	Planning	Catering	
14		First aid personnel on site.	Continuous	Catering manager Event management St John Ambulance	
36		Waste disposal procedures.	Event/daily	Cleaning and waste manager	
46		Cleaning procedures.	Planning	Cleaning and waste manager	
9		Backup power for refrigeration.	Bump-in	Site management	
16	Manual handling	Safe work methods/job safety analysis from all contractors.	Planning	Site management	
20		Inspection of safe work methods/job safety analysis and auditing against standards.	Bump-in	Site management Safety officer	
11		Training of contractors' personnel.	Planning	Site management Human resources	
48		Inductions include manual handling.	Bump-in	Human resources	



# APPENDIX H – EXAMPLE – EVENT SAFETY MANAGEMENT SYSTEM (SMS)

## ROCK CONCERT HELD IN A MAJOR INDOOR STADIUM

SMS ELEMENT	WHAT DO YOU DO	HOW IS IT DONE	WHO DOES IT	RELEVANT RISK NO.	DOCUMENT LINKS
<b>Regulations and permits to operate</b>	Planning design and layout of staging and overlay	Consultation between promoter, venue owner and event organiser	Event organiser/venue	Define the relevant risk number from the risk register	Define the reference number of relevant documents
	Develop relationship with regulators	Consultation	Event organiser/venue		
	Establish regulations and standards for OHS, environment, gas safety, liquor licensing	Investigate library	Event organiser		
	Determine specific compliance requirements for regulations	Set requirement	Event organiser		
	Audit of contractors to ensure regulatory compliance	Networking, reference from other venues, past experience	Event organiser		
	Compliance – companies, contractors and staff	Induction of relevant parties to venue	Event organiser/ venue		
	Product auditing- inspect and test for suitability	Rehearse and test	Event organiser/venue		
	Engineering compliance	Sign-off	Event organiser/venue		
	'Hold points' to ensure that contractors and staff deliver	Contract-payment terms	Event organiser		

# APPENDIX H – EXAMPLE – EVENT SAFETY MANAGEMENT SYSTEM (SMS)

SMS ELEMENT	WHAT DO YOU DO	HOW IS IT DONE	WHO DOES IT	RELEVANT RISK NO.	DOCUMENT LINKS
<b>Training</b>	Staff inductions	On the job instruction for new starters. First day of work.	Human resources		
	Job specific	Training courses - location and product specific	Supervisors. Templates provided by human resources.		
	Emergency management - event specific	Maps and plans, detailed signage, venue tour, key staff, displays, giant screens and PA	Venue emergency co-ordinator		
	Event organiser induction	Face-to-face delivery, venue tour, documentation required	Venue		
	Documentation	Clear and concise training materials, no jargon and must be user-friendly. Adult learning principles and interactive	Human resources		
	Tool box talks	In-situ at ground level	Site manager		
	<b>Communications and promotions</b>	Advertising and promotional campaign for the event that includes safety messages	Mass media press releases, advertising, web-based	Media communications manager	
Letterbox drop regarding local traffic conditions, local paper		Letter box drops, public consultation, telephone line	Media communications media		
Industry specific newsletter		Newsletter	Operations/ marketing managers		
City of Melbourne information provided		Consultation with City of Melbourne	Marketing manager		
Links to websites		Web, consultation	Marketing manager		
<b>Entertainment/ Field of Play</b>	Layout and space allocation – priority	Maps and plans	Operations/ event organiser		
	Segregation between spectators and entertainment	Maps, plans, barriers and staff	Operations/event organiser		
	Space allowed for services	Maps, plans, barriers and staff	Operations/venue management		

# APPENDIX H – EXAMPLE – EVENT SAFETY MANAGEMENT SYSTEM (SMS)

SMS ELEMENT	WHAT DO YOU DO	HOW IS IT DONE	WHO DOES IT	RELEVANT RISK NO.	DOCUMENT LINKS
<b>Crowd management</b>	Layout and space allocation - priority	Maps, plans, barriers and staff	Operations/ event organiser		
	Allocated entry and exit routes	Maps, plans, barriers and staff. Referral to general standards for throughput rates and maximum capacities. Venue building design specifications.	Venue management		
	Designated queuing counting system	Maps, plans, barriers and staff. Referral to general standards for throughput rates and maximum capacities. Venue building design specifications.	Venue management		
	Control of entry and exits	Maps, plans, barriers and staff	Venue management		
<b>Security</b>	Segregation of crowd from different levels of ticket holders	Maps, plans, barriers and staff	Venue management/ event organiser		
	Layout and space allocation – priority.	Consultation with emergency services (including local police), maps and plans	Operations/ event organiser		
<b>Documentation and records</b>	Intelligence - threat assessment overall	Consultation with local police	Victoria Police/ venue management		
	Administrative control. Strict on-line filing. Business management system. File codes.	Checklist - swap-merging	Venue management and event organiser		
	Training in record keeping.	Face-to-face. To be included in induction for new starters.	Venue management/ event organiser		
<b>Event operations</b>	Training/briefings	Information sheets - tiered information provided for various supervision-chain of command	Venue management		
	Rostering of event operations staff	Determine availability and operate through labour hire company	Venue management		

# APPENDIX H – EXAMPLE – EVENT SAFETY MANAGEMENT SYSTEM (SMS)

SMS ELEMENT	WHAT DO YOU DO	HOW IS IT DONE	WHO DOES IT	RELEVANT RISK NO.	DOCUMENT LINKS
<b>Inspection and testing</b>	Overlay – temporary stage installation	Overlay plans, maps	Event organiser/ venue management		
	Product list of all major pieces of equipment used	Documented inventory of equipment and safety instructions from supplier	Event organiser		
	Regulatory requirements	Consultation with supplier regarding to inspection and testing	Event organiser/ venue management		
	Venue services - fire extinguisher. Emergency equipment.	Visual inspection, documentation. Australian standard.	Site management, contractor		
<b>Contractor management</b>	Contract lifecycle mechanisms, i.e. procurement, selection, scope, implementation	Contract terms and conditions	Contract manager		
	Audits – monitoring	Visual inspection, documentary review, feedback, non-compliance contract clauses	Event organiser/venue management		
	Hold points – sign-off	Milestones, payment schedule, penalties	Event organiser/venue management		
<b>Emergency preparedness</b>	Emergency management plan	Consultation with emergency management committee	Venue management Event organiser Emergency services		
<b>Incident investigation</b>	Record and document control	Collect incident information and review in a timely and accurate basis	Event management Incident investigator		
	Central command post-venue communication	Review of documentation and response system	Venue management		
<b>Monitoring and assessment</b>	Monitoring event in real time	CCTV, control room monitoring, incident register, information management system	Venue management		
	Event audit	External readiness inspection	Contractor		
<b>Management review</b>	Post event debrief	Report back from each functional area on safety issues	Co-ordinated by venue management. Each functional area.		

# APPENDIX I – JOB SAFETY ANALYSIS

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The job safety analysis (JSA) process need not require enormous amounts of time or paperwork.

This JSA approach recognises that different trades do different tasks. Many tasks undertaken are done routinely and have probably been done the same way for years - sometimes safely, sometimes not.

It is essential for those doing these tasks to know the best and safest way of doing the job. Use these worksheets and follow the five steps to conduct an effective JSA.

## FIVE STEPS TO EFFECTIVE JSA

### 1. Document the activity

Assemble those involved in the activity and then, using the JSA worksheet, write down in step by step form the tasks that make up the activity.

### 2. Identify the hazards

Next to each task, identify what part of the task may cause injury to those engaged in the task or others in the vicinity.

### 3. Document the control measures

For each identified hazard, assess the associated level of risk to those involved, and then list the control measures required to eliminate or minimise those risks.

### 4. Identify who is responsible

Document the name of the person responsible for implementing the control measure.

### 5. Monitor and review

Make sure the activity is supervised to ensure the documented process is being followed. The documentation should be reviewed whenever a documented activity changes or when there is a change of personnel or after an appropriate length of time.

## REMEMBER

- The JSA provides a written record of the process to be used to proceed on a task. As it is a record that can be used in court, it should be signed off by the parties who have responsibility for the tasks.
- The JSA is only a written record. Management processes must be in place to ensure workers have the skills to complete the job and that there is a required level of supervision to ensure the tasks are completed as documented.
- All employees involved in the activity, not just the principal contractor or supervisor, should complete the JSA.

## HIGH-RISK TASKS

You could use the JSA worksheet to conduct an analysis of the following high-risk tasks. However, it is recommended that overtime JSAs are completed for all tasks on building sites.

- Trenching and excavation.
- Working at heights, particularly on roofs or stage rigs.
- Working with construction machinery.
- Working near power lines.
- Lifting heavy weights.
- Entering a confined space.
- Working with hazardous substances and/or dangerous goods.
- Working in public places or before the venue has exclusive use.
- Working near gas or electricity.
- Working with/near asbestos or lead.
- Steel erection.
- Welding.
- Working with cranes.

# APPENDIX J – JOB SAFETY ANALYSIS (JSA) WORKSHEET

<b>Company name:</b> <input style="width: 90%;" type="text"/>	<b>Date:</b> <input style="width: 90%;" type="text"/>	<b>JSA No.</b> <input style="width: 90%;" type="text"/>
<b>Site name:</b> <input style="width: 90%;" type="text"/>	<b>Permit to work requirement:</b> Yes <input type="checkbox"/> no <input type="checkbox"/>	
<b>Contractor:</b> <input style="width: 90%;" type="text"/>	<b>Telephone:</b> <input style="width: 90%;" type="text"/>	
<b>Activity:</b> <input style="width: 90%;" type="text"/>		

<b>ACTIVITY</b> List the tasks required to perform the activity in the sequence they are carried out.	<b>HAZARDS</b> Against each task list the hazards that cause injury when the task is performed.	<b>RISK CONTROL MEASURES</b> List the control measures required to eliminate or minimise the risk of injury arising from the identified hazard.	<b>WHO IS RESPONSIBLE</b> Write the name of the person responsible (supervisor or above) to implement the control measure identified

**Remember: Each JSA must be site specific. Include all workers in the development of this JSA.**



## **APPENDIX K – EXAMPLE – EVENT SAFETY POLICY**

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### **EVENT SAFETY POLICY**

We are committed to ensuring the health and safety of all participants in the staging of our event.

All stakeholders participate through consultation to deliver a safe and successful event, each sharing responsibility for one another.

We will endeavour to identify and manage all risks/hazards and where possible eliminate them in our workplace.

We will work with all regulatory and all other authorities to ensure compliance with relevant legislation.

Where no guidelines exist, we will actively work with our partners and stakeholders to achieve best practices.

The ultimate goal is to stage a successful event with no harm to people or damage to the environment.

**CEO**

# **APPENDIX L – EXAMPLE – EVENT SAFETY SYSTEM ELEMENTS**

---

## **AUSTRALIAN GRAND PRIX CORPORATION**

The Australian Grand Prix Corporation's safety system elements are:

- leadership and our people;
- risk assessment and management;
- hazards and incidents;
- emergency preparedness;
- running the venue – event operations;
- running the event – event product;
- contractor management;
- design, construction and maintenance;
- working with third parties;
- information and communication;
- records and documentation; and
- monitoring and assurance.



# APPENDIX M – CASE STUDY EXAMPLE – BOW TIE DIAGRAM

## CASE STUDY EXAMPLE - BOW TIE DIAGRAM

### Hazard (left side)

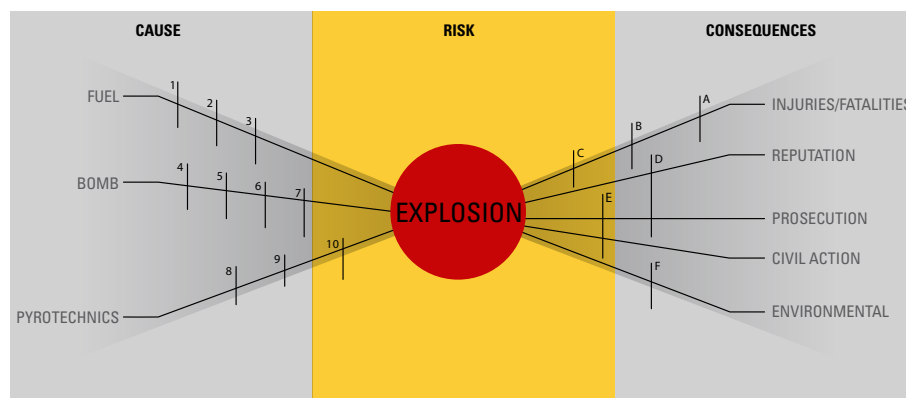
1. Define the risk - this goes into the middle of your bow tie and the middle of your page.
2. Identify the hazards - list all the possible hazards that may cause the risk to occur. Place them down the left side of your page.
3. Define contributory pathways - draw a straight line from each hazard to the risk in the centre of your page.
4. Identify controls that relate to each hazard. There may be several controls to each hazard. Your page will quickly become cluttered. As can be seen in the example diagrams that follow, make a 'mark' on the pathway corresponding to where the control exists. Number the 'mark' and describe briefly in a legend at the bottom of the page what each mark represents.

*NB: Some controls may occur in chronological order. For example, a design approval (DA) application of a temporary grandstand will occur before an operational readiness inspection of the structure is conducted after it is constructed. The earlier control should be listed to the left of the latter on the bow tie.*

### Consequence (right side)

A similar process applies to the consequence side (right side) of the bow tie. The process is outlined below.

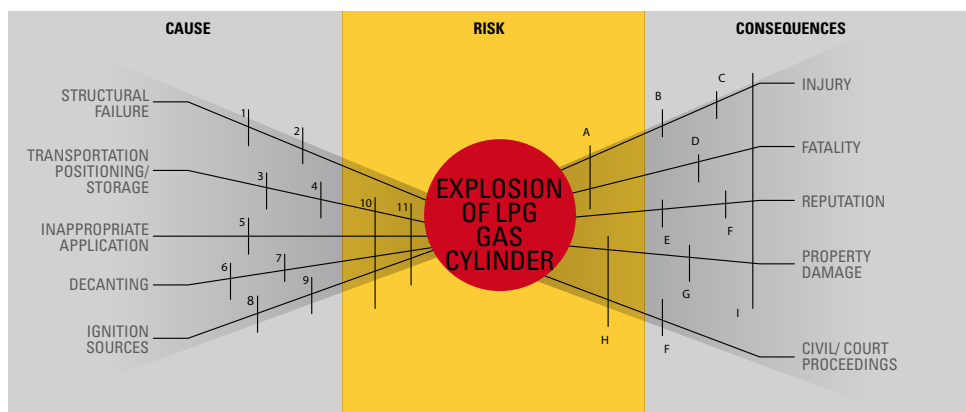
1. Describe each possible consequence that may result from the risk.
2. Draw a pathway from the risk to each consequence.
3. Identify the controls that apply to each consequence. (Mark and number the control on the appropriate pathway location)
4. Transpose those controls into your event plan, or other planning documents. From this implement the controls as described in your bow tie.
5. Ensure your audit/assurance program checks the adequacy and effectiveness of the controls listed in the bow tie.



#### Legend

- |                             |   |
|-----------------------------|---|
| 1 Safe storage and handling | A First aid   |
| 2 Supervision and training  | B Ambulance   |
| 3 Documentation             | C Hospitals   |
| 4 Personal security checks  | D Media/ PR   |
| 5 Baggage checks            | E Legal   |
| 6 Ground checks             | F Emergency services and<br>Dept. of Human Services |
| 7 Threat assessment         |   |
| 8 Licensing                 |   |
| 9 Plan                      |   |
| 10 Exclusive zones          |   |

# APPENDIX M – CASE STUDY EXAMPLE – BOW TIE DIAGRAM



## Legend

- |    |                                  |   |                                |
|----|----------------------------------|---|--------------------------------|
| 1  | Testing control                  | A | Medical & emergency            |
| 2  | Building approval certification  | B | Reporting                      |
| 3  | Caging/barriers                  | C | WorkSafe Victoria              |
| 4  | Operational readiness inspection | D | Investigation                  |
| 5  | Site induction and briefing      | E | Refunds                        |
| 6  | Well vented areas                | F | Media                          |
| 7  | Static earthing                  | G | Fines                          |
| 8  | No smoking policy                | H | Investigation re-certification |
| 9  | Exercise exclusion zones         | I | Emergency plans                |
| 10 | Decanting procedures             |   |                                |
| 11 | Training in operating procedures |   |                                |

## APPENDIX N – CROWD DENSITY

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Although unlikely, a crowd crush can occur at any event. The most common causes of crowd crush hazards are:

- **overcrowding** – excessive numbers of people for the space available; and
- **crushing** – pressing of a mass of people against a fixed solid object.

There are a number of crowd actions that may contribute to the overcrowding or crushing, including:

- **trampling** – crushing of people underneath others;
- **surging** – a sudden spontaneous pressure wave of people in the same direction;
- **pushing** – one or more individuals thrusting their way through a crowd;
- **swaying** – a lateral movement of a crowd;
- **rushing** – running or rapid movement in one direction; and
- **slips, trips and falls** – stumbling or loss of footing.

# APPENDIX 0 – SAFE AMUSEMENT RIDES

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There are many safety risks associated with amusement rides. As such, particular care should be taken by the event organiser to ensure that adequate controls are in place to protect members of the public from the safety risks pertaining to such rides.

## HAZARDS

Specific hazards may include:

- clearance between rides, fixed structures and vegetation;
- stability of the ride - firmness and slope of the ground and adequate blocking of the ride need to be considered;
- identification of poor maintenance;
- poor training and operational procedures;
- inadequate set-up;
- missing labels or warning signs; and
- inadequate or inappropriate location of fencing or barricades.

## RISK ASSESSMENTS

A risk assessment of hazards identified should be undertaken. Either a qualitative or quantitative (depending upon failure data available) risk assessment could be conducted.

Some additional factors affecting the risk assessment may include:

- operations manual with the ride;
- maintenance manuals;
- maintenance as identified by the manufacturer has been carried out;
- pre set-up maintenance undertaken;
- engineering assessment of the ride undertaken within the past 12 months; and
- details of the engineering assessment have been documented.

## RISK CONTROLS

While the formal approach to controlling risk involves applying the hierarchy of controls, some standard controls normally considered include:

- ensuring the ride has been maintained and set-up in accordance with the manufacturer's instructions;
- check areas not readily visible to ensure proper maintenance has been undertaken;
- issues identified in the engineering assessment have been addressed; and
- all operators and supervisors have been trained and attendance has been planned to ensure that adequate levels are available at all times.

# APPENDIX O – SAFE AMUSEMENT RIDES

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## RELEVANT LEGISLATION

### Victorian electrical legislation

- *Electrical Safety Act 1998*
- *Electrical Safety (Installations) Regulations 1999*
- *Electricity Safety (Network Assets) Regulations 1999*

Other

- 'No Go Zone' rules
- Certificates of electrical safety

### Victorian WorkCover Authority legislation

- *Occupational Health and Safety Act 2004*
- *Occupational Health and Safety (Plant) Regulations 1995*

### Australian Standards

- *Australian Standard: Electrical Installations – Shows and Carnivals (AS 3002-2002\_)*
- *Australian Standard: Amusement Rides and Devices – In-service Inspection (AS 3533.3-2003)*
- *Australian Standard: Amusement Rides and Devices – Operation and Maintenance (AS 3533.2-1997)*
- *Australian Standard: Amusement Rides and Devices – Operation and Maintenance – Logbook (Supplement 1 to AS 3533.2-1997)*

# APPENDIX P – ELECTRICAL SAFETY FOR SHOWS

---

There are many safety risks associated with electrical equipment at major events, particularly if they are of a temporary nature. Therefore, particular care should be taken by the event organiser to ensure that adequate controls are in place to protect members of the public from the safety risks pertaining to such equipment.

## HAZARDS

Specific hazards may include:

- electrical shock resulting in electrocution;
- excessive temperatures from overloading of circuits - can result in a fire;
- lack of insulation or damaged insulation resulting from poor maintenance;
- temporary wiring not buried at appropriate depth or strung through trees;
- proximity of equipment to electrical overhead lines;
- ingress of liquids, dusts, and vapors causing an equipment earthing and possible electrocution or shock;
- modifications to electrical equipment conducted by unauthorised personnel; and
- missing labels or warning signs.

## RISK ASSESSMENTS

A risk assessment of hazards identified should be undertaken. Either a qualitative or quantitative (depending on failure data available) risk assessment could be conducted.

Some additional factors affecting the risk assessment may include:

- the presence of water - water increases the risk of electrocution;
- integrity of insulation - worn electrical insulation can considerably increase the risk of electrocution; and
- non-earthing of equipment - the non-earthing of equipment, including generators, can also increase the risk of electrocution.

## RISK CONTROLS:

While the formal approach to controlling risk involves applying the hierarchy of controls, some standard controls normally considered include:

- Insulation.
- Barriers or enclosures.
  - Protection by barriers and enclosures should be firmly in place. Removal of barriers, opening of enclosures, or withdrawal of part of enclosures such as a door should not be possible, unless:
    - the use of a key or tool is required;
    - an interlock is fitted; or
    - an intermediate barrier is provided.
- Degree of protection (IP Code; 'weather proofing').
  - Live parts should be inside enclosures or barriers may be used for protection of:
    - persons against access to hazardous parts inside the enclosure;
    - equipment against hazardous parts inside the enclosure; and
    - equipment inside the enclosure against the ingress of water.
- Equipment maintenance such as:
  - electrical equipment/appliances;
  - flexible electrical cords; and
  - residual current devices.

# APPENDIX P – ELECTRICAL SAFETY FOR SHOWS

---

## RELEVANT LEGISLATION

### Victorian electrical legislation

- *Electrical Safety Act 1998*
- *Electrical Safety (Installation) Regulation*
- *Electricity Safety (Network Assets) Regulations*

### Other

- 'No Go Zone' rules
- Certificates of electrical safety

### Victorian WorkCover Authority legislation

- *Occupational Health and Safety Act 2004*
- *Occupational Health and Safety (Plant) Regulations 1995*

### Australian Standards

- *Australian Standard: Electrical Installations (AS 3000-2000)*
- *Australian Standard: Electrical Installations – Shows and Carnivals (AS 3002-2002)*

# APPENDIX Q – SAFE USE OF TEMPORARY GAS INSTALLATIONS FOR CATERING

---

An industry code has been developed to define the method and practice of safe storage of LPG used for catering purposes in marquees in Victoria.

The requirements for gas cylinders in permanent structures, such as buildings, caravans and catering vehicles, are covered by the *Australian Standard: The Storage and Handling of LP Gas* (AS/NZS 1596-2002).

Some excerpts from the draft industry code follow.

## **In relation to location of gas appliances, the Code states:**

- the appliance must have either an Australian Gas Association (AGA) approval label or second-tier approval badge affixed;
- the appliance must not block an exit or travel path;
- the appliance must be in a well-ventilated area;
- the appliance must be no closer than 0.5m from any combustible surface;
- the appliance must be at least 0.5m from the cylinder valve; and
- the appliance must be located at least 1.5m away from the cylinder (when measured from the centre of the base of the cylinder).

Where possible, all gas cylinders should be stored outside the temporary structure. In situations where multiple marquees are installed, the provision of a service alley between each marquee should be considered.

The minimum width of the service alley should be no less than 1.62m. Where two 9kg cylinders are installed either side of the alley, a minimum walkway distance of 1m is maintained. This ensures there is adequate ventilation.

## **SIGNAGE**

Each marquee must be signposted with a unique site number to enable easy identification in the event of an incident. These site numbers must be registered on a site map for the event.

The site map should also identify the locations, sizes and quantities of all LPG cylinders stored and used on site.

When setting up LPG cylinders, the following points must be adhered to:

- the cylinder is within the 10-year test period;
- the cylinder is free from damage or corrosion (rust);
- the cylinder is not blocking an exit or travel path;
- the cylinder is in a well ventilated area;
- the cylinder is placed out of direct sunlight;
- the cylinder is on a level, non-combustible surface;
- the cylinder is stored and secured in a manner such as to ensure it cannot be accidentally moved or dislodged whilst in normal use;
- the cylinder is secured from toppling over which can be achieved by placing the cylinder into a milk crate;
- the cylinder is protected from any impact;
- the cylinder pressure valve is facing away from the temporary structure;
- no combustible materials, such as cardboard boxes or paper, are stored or placed in the service alley;
- the cylinder is labelled to indicate the appliance it is servicing;
- the cylinders are not being stacked on each other;
- no ignition sources are within the exclusion zone;
- the cylinder will be installed to ensure that the point of withdrawal is in contact with the vapour space, i.e. upright;
- connections must be either hard-faced bull-nose with hex nut or soft-faced bull-nose with hand wheel; and
- never tamper with the safety valve or cylinder fittings or use undue force on the cylinder valve.



# APPENDIX Q – SAFE USE OF TEMPORARY GAS INSTALLATIONS FOR CATERING

## FIRE SAFETY

The provision of appropriate portable fire fighting equipment is paramount. The incorrect type of fire extinguisher used on a certain type of fire could have fatal consequences (e.g. if a water type fire extinguisher is discharged onto live electrical equipment).

For large events, advice from the fire authority or a fire safety consultant should be obtained. Some events will require a fire permit to allow gas-powered appliances to be lit if used on a day of total fire ban. The fire authority issues such permits and strict requirements must be adhered to.

### Fire fighting equipment

Each marquee, where heating appliances are being used (e.g. BBQ, donut cooker, deep fryer, hot plate, etc.) will require at least one appropriately rated fire extinguisher to be available, no further away than 10 metres from the heat source. Only appropriately rated fire extinguishers should be supplied to these areas according to the table below.

HAZARD	TYPE OF FIRE FIGHTING EQUIPMENT
Gas fired BBQ	Dry powder type fire extinguisher
Deep fryer (for chips, donuts, etc.)	Dry powder type fire extinguisher <i>or</i> wet chemical type fire extinguisher
Food warmer	Dry powder type fire extinguisher
LPG cylinder store or decanting area (less than 1,000 litres total gas stored)	Dry powder type fire extinguisher
LPG cylinder store or decanting area (more than 1,000, and less than 12,000 litres stored)	Dry powder type fire extinguisher and at least one fire hose reel

A fire blanket of 1.2 x 1.8m in size needs to be provided in each tent/marquee where deep fryers are installed. The blanket should be securely hung adjacent to the fryer.

Each fire extinguisher and fire blanket should have its location identified by a symbolic sign in accordance with *Australian Standard: Portable Fire Extinguishers and Fire Blankets – Selection and Location* (AS 2444-2001).

### Fire permit

During a total fire ban, the lighting of a fire in the open air, for the purposes of cooking food, is prohibited unless a permit has been obtained. The relevant fire authority prior to the event occurring must approve this.

### Hazard assessment and risk control

Prior to commencement of the event, a hazard assessment must be undertaken. This should cover the design layout, equipment in use and emergency preparedness to ensure that potential hazards can be identified and controls implemented. Any hazard assessment will include evaluation of:

- minimum/maximum LPG usage requirements;
- ingress/egress and likely pedestrian travel routes;
- potential ignition sources;
- ventilation; and
- potential LPG emergency scenarios.

# APPENDIX Q – SAFE USE OF TEMPORARY GAS INSTALLATIONS FOR CATERING

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Assessments will identify and record any hazards noted, and recommend controls to be used to minimise the risks.

The event organiser will ensure development of emergency procedures covering LPG and related incident scenarios, determined through risk assessments, and that an appropriate number of personnel are trained in these procedures.

The event organiser will also ensure that adequate supplies or emergency equipment, including fire extinguishers and first aid kits, are in place.

## **Regulatory inspection**

The event organiser will ensure that all required regulatory approvals relating to their use of LPG have been received prior to the commencement of operations. He/she will provide – to the relevant regulatory authorities – access to all facilities and relevant records at any time during the operation.

## **Third party validation**

While the event organiser (or their contractor) will ensure compliance with the industry code for the event, it is highly recommended that an independent third party be engaged for the purposes of reviewing overall site risk management arrangements as they particularly relate to gas safety.

Such a review would be undertaken by a consultant with a relevant background, suitable expertise and detailed knowledge and understanding of the industry code.

## WORKSAFE VICTORIA

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