GUIDANCE MATERIAL

GUIDANCE ON THE USE OF POSITIVE PERFORMANCE INDICATORS

Australian Government
Department of Employment and Workplace Relations
Office of the Australian Safety and Compensation Council

TO IMPROVE WORKPLACE HEALTH AND SAFETY

NOVEMBER 2005

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FOREWORD

This document provides practical assistance for use by employers, workers, health and safety representatives, OHS committees, OHS professionals, and other related parties.

Except where made mandatory by or under a law of the Commonwealth, a state or a territory, materials issued by the Australian Safety and Compensation Council (ASCC) are of an advisory nature.

The ASCC leads and coordinates national efforts to prevent workplace deaths, injury and disease in Australia.

Through the quality and relevance of the information it provides, the ASCC seeks to influence the awareness and activities of every person and organisation with a role in improving Australia's occupational health and safety (OHS) performance.

More specifically, the ASCC aims to:

- support and enhance the efforts of the Australian Government and State and Territory governments to improve the prevention of workplace deaths, injury and disease
- work in alliances with others to facilitate the development and implementation of better preventative approaches, and
- ensure the needs of small business are integrated into these approaches.

The *National OHS Strategy 2002-2012,* which was endorsed by the Workplace Relations Ministers' Council on 24 May 2002, records a commitment by all Australian, State and Territory governments, the Australian Chamber of Commerce and Industry and the Australian Council of Trade Unions to share in the responsibility of ensuring Australia's performance in work-related health and safety is continuously improving.

This *National OHS Strategy* sets out five 'national priorities' to achieve short-term and long-term improvements.

These priorities are to:

- reduce high incidence and high severity risks
- improve the capacity of business operators and workers to manage OHS effectively
- prevent occupational disease more effectively
- eliminate hazards at the design stage, and
- strengthen the capacity of government to influence OHS outcomes.

In line with these priorities, the ASCC declares national codes of practice under section 6 of the *Australian Workplace Safety Standards Act 2005.*

In common with other ASCC documents, this guidance note is an advisory instrument only.

CONTENTS

FIGURES

TABLES

INTRODUCTION

This *Guidance on the Use of Positive Performance Indicators to Improve Workplace Health and Safety* provides information and advice to employers, workers, unions, occupational health and safety practitioners, managers, health and safety committees and representatives and other interested persons. It develops and enhances the management of occupational health and safety (OHS), and minimises the risk of injury and disease to persons in the workplace.

Positive Performance Indicators (PPIs) focus on assessing how successfully an organisation is performing through monitoring the processes which should produce good OHS outcomes. PPIs can be used to measure relevant OHS systems, processes, management and compliance with OHS practices in the workplace.

This guidance has evolved from earlier work by the ASCC on performance indicators in the construction industry, and is primarily designed for organisations in the construction, health and community services, manufacturing, and transport and storage industries. Organisations in other industries should also find the information useful.

Part 1 – Health and Safety Performance Measurement provides information on what health and safety performance is, for what purposes it is measured, and how PPIs can be used to drive and monitor improvements in the management of health and safety at work.

Part 2 – Developing and Using Positive Performance Indicators describes a principle-based approach and step-by-step process to follow when developing PPIs for use in your organisation. It includes examples and tools to assist you in this process. The methodology outlined is generic and is suitable for use in small to medium enterprises as well as in larger organisations. The content and scope of any developed PPI are dependent upon the specific needs of an organisation and on the scale and maturity of any systems in place for the management of OHS.

PART 1
HEALTH AND SAFETY PERFORMANCE MEASUREMENT

Key Points

1. What is OHS performance?
2. Why do we measure OHS performance?
3. OHS performance indicators
4. Using PPIs to drive OHS activities

1.1 What is OHS performance?

1.1.1 OHS performance can be described as a measure of the level of effectiveness of those business activities aimed at the prevention of injury and disease to persons in the workplace.

1.1.2 Depending upon what aspects of OHS performance are being measured, this evaluation may demonstrate:

- historical OHS performance and performance trends
- compliance with statutory obligations
- visible commitment to duty of care responsibilities, and
- good management practices.

1.2 Why do we measure OHS Performance?

1.2.1 The OHS performance of an organisation may be measured to satisfy a number of different needs from a number of different stakeholders. For this reason, it is important to first establish how performance information is to be used prior to the consideration of any specific performance indicators.

1.2.2 Organisations typically measure performance to determine whether objectives or targets are being met and can involve either outcome-focused or process-focused indicators of performance. Traditionally, many organisations have used outcome measures to monitor their OHS performance. Outcome indicators, such as Lost Time Injury Frequency Rates (LTIFRs), measure if an organisation is achieving its targets.

1.2.3 PPIs on the other hand are used to measure how well arrangements for workplace health and safety are performing. PPIs can also identify areas where improvement strategies can be targeted. When PPIs are used to complement the information obtained from outcome measures, they can significantly enhance the quality of OHS information which can then be used to assist in the development of improvement strategies within an organisation.

1.2.4 There is no substitute for designing good OHS practices into the workplace and using the information collected from a mixture of outcome and process indicators to further improve those processes.

1.2.5 The main reasons for measuring OHS performance, using PPIs, are:

a) **To minimise the occurrence of workplace injury/disease by reducing the level of risk at work**

i) The most important reason for measuring OHS performance is to monitor the level of success of activities aimed at preventing workplace injury and disease and to identify OHS areas for improvement.

b) **To provide informative feedback mechanisms**

i) Monitoring and recording of OHS activities and initiatives in the workplace can provide effective immediate feedback to employees and managers as to whether or not the things that should be done, are being done. This information provides an indication of commitment to OHS improvement by management. The types of performance indicators that would be used in this instance would tend to be ‘key activity’ PPIs.

c) **To provide a measure of sound management and corporate sustainability**

i) Institutional investors have significant interest in OHS performance as a component of corporate social responsibility and socially responsible investment. Investors are generally supportive of the idea that good OHS performance is an indicator of good management.

ii) Investors are interested in OHS performance indicators that are relatively few in number, relevant to the industry in question and that are comparable between companies, ideally on a global scale (Mansley, 2002). It would appear to date, investor interest has mainly been in the area of 'bottom-line' outcome indicators.

d) **To facilitate a process of OHS benchmarking between organisations and industries**

i) Benchmarking, or measuring your company's processes and/or performance outcomes against another, when applied in the field of OHS, has tended to focus on outcome indicators as opposed to PPIs. This has occurred for two principal reasons. Firstly, when organisations compare performance, they tend to focus on the bottom-line results that impact on their business, such as accident and/or compensation claim costs, fatality rates and incidence rates. Secondly, because PPIs are often developed to meet the specific needs of an organisation, it is often difficult to find similar organisations that are measuring exactly the same things. For this reason PPIs have only a limited application in benchmarking, and more work may need to be undertaken within industry groups to develop appropriate and relevant measures for their needs.

1.3 OHS performance indicators

1.3.1 The New South Wales Health Department (1998) defines a performance indicator as "a statistic or other unit of information which reflects *directly or indirectly*, the extent to which an anticipated outcome is achieved, or the quality of processes leading to that outcome"[1]. In order to measure particular aspects of an organisation's OHS performance, performance indicators need to be developed for areas that are to be evaluated.

1.3.2 Performance indicators can be either:

Quantitative – an indicator that can be counted or measured and is described numerically. For example, number of safety audits conducted, injury frequency rates.

Qualitative – an indicator that would describe or assess a quality or a behaviour. For example, employee ratings of management commitment to achieving 'best practice' in OHS.

[1]Cited in OHS Performance Measurement in the Construction Industry, Development of Positive Performance Indicators, NOHSC 1999.

1.3.3 Measurement of safety performance can involve either outcome-focused or process-focused (also known as positive) indicators of performance. These two types of measures fulfil different roles and are therefore best used in combination. Traditionally, many organisations have used only outcome measures to monitor their OHS performance.

Outcome indicators focus on the measurement of loss, such as lost time injury frequency rates (LTIFRs), workers' compensation costs or fatality incidence rates. These indicators are generally measures of failure to control or manage risks. Lost time injury frequency rate has long been regarded as the standard for the measurement of OHS performance. However, it is increasingly recognised that these outcome indicators are limited in their use as the numbers recorded are generally low, which makes establishing trends difficult. In addition, outcome indicators give no indication of how to address key risks and are therefore not appropriate for identifying problem areas.

The failure of outcome indicators on their own to adequately reveal how well OHS is managed in the workplace has established a need for additional measures of OHS performance such as PPIs. These measures are aimed at evaluating the management of OHS in an organisation and highlight the areas in health and safety where systems and procedures could be improved. These indicators are often described as process or positive measures of performance (NOHSC, 1999).

PPIs focus on assessing how successfully an organisation is performing by monitoring the processes that provide good OHS outcomes. PPIs can be used to measure activities undertaken to positively impact on outcome performance in the workplace, and to identify problem areas where additional preventative action is required.

PPIs can be developed on an organisation/industry basis, or on a departmental/workgroup basis, and normally involve consultation with employees and other stakeholders in the development of relevant measures. Examples of PPIs include:

- the number of safety audits conducted
- the percentage of sub-standard conditions identified and corrected as a result of a safety audit, and
- the percentage of employees receiving OHS training.

Advantages of using PPIs to supplement outcome indicators to measure OHS performance include:

- the ability to measure and evaluate the effectiveness of OHS management
- the provision of immediate feedback mechanisms regarding the management of OHS, and
- being able to make immediate improvements to OHS performance, if required.

1.3.4 When used in conjunction with outcome measures, PPIs can offer a comprehensive overview of health and safety management performance and assist the search for the underlying causes of work-related injury and illness (NOHSC,1999; Bottomley, 1994). For this reason, it is important that organisations develop and use a balanced mix of both outcome indicators and PPIs to effectively measure OHS performance.

1.3.5 The notion of using PPIs to improve OHS performance has evolved from the model of process control in quality management. In this model, process steps leading to sub-standard outputs are defined and examined to identify factors that have caused this sub-standard output. By addressing these factors in a timely manner, the standard of the output can be improved. When this process is applied consistently over time it leads to a cycle of continuous improvement (refer Figure 1). The quality management model at Figure 1 can be applied to the process of OHS management.

Figure 1 – Quality Model for Process Improvement

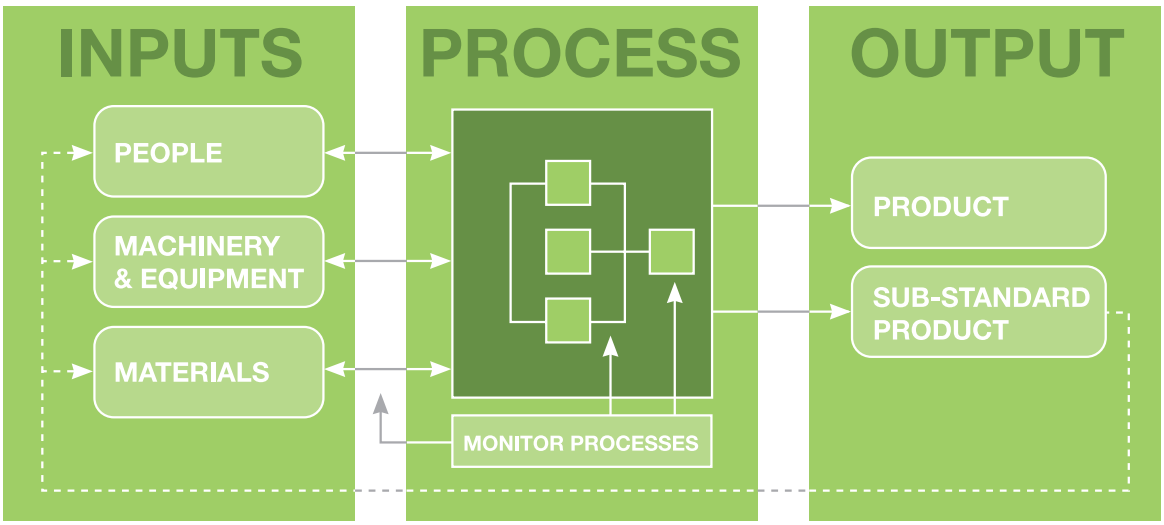

Table 1 - Types of Performance Indicators

Positive Performance Indicators				Outcome Indicators
Input Key OHS Activities	**Process** Monitoring Key Risks	**Output** Progress Towards Goals	*Goals*	**Outcome** Targets
• Audit undertaken to identify hazardous materials • Training in hazardous materials storage and handling instructions provided to staff	• Observed that hazardous materials being stored and handled correctly	• Number or % of staff competent in hazardous materials storage and handling requirements	• *Storage and handling instructions developed for all hazardous materials, and understood by staff*	• X% reduction in the incidence of workplace injury • Areas where storage and handling targets are not met (eg by sector or by hazard risk) are identified
• Equipment provided and staff trained in safe work from heights procedures	• Observed that fall arresters being used at heights	• Number or % of staff competent in safe working from height requirements	• *Reduction in falls from heights*	• Areas where improvement is required are identified

1.3.6 Table 1 outlines the main types of OHS performance measures currently used in Australia. Through considering the Quality Model for Process Improvement as applied to the management of health and safety, it provides some examples of each type of indicator.

1.3.7 PPIs are measures of actions or initiatives introduced to prevent workplace injury and disease. In the model for process improvement, PPIs may be one of the following:

a) **Inputs (Key Activities)**

i) Input PPIs are measures of what actions or initiatives have been undertaken in the workplace to improve OHS and can provide useful information on participation, leadership and communication. Although they are seen as good indicators of commitment and effort, they are not indicators of the effectiveness of the activities.

ii) In practical terms, organisations will need to define those activities in their safety management system that need to be promoted and reinforced. A focus on these activities can be used to visibly drive the safety culture in the workplace. PPIs can be developed for these activities.

b) **Processes (Monitoring Key Risks)**

i) Process PPIs are measures that are used to monitor the major risks in an organisation. These can be developed by identification of the key contributors to the outcomes of concern and developing measures to monitor behaviours and practices. For example, if a high incidence of eye injuries was an "outcome of concern" and key contributors to this incidence were factors like poor screening of hazardous work (e.g. welding) and low use of personal protective eyewear, then performance measures would be developed to monitor these practices.

ii) In developing PPIs of this type, organisations should focus on all core risks and ensure that measures are in place to provide an indication that risk control practices are being followed.

c) **Outputs (Milestones)**

i) Output indicators are used to measure outputs in terms of the achievement of objectives, and on the progress towards the achievement of higher level OHS goals and targets.

For example:

- if the goal is that within a particular time period, *storage and handling requirements for hazardous materials are understood by staff*,
  - a suitable indicator of this type would be number or % of staff competent in the storage and handling requirements for hazardous substances.

1.4 Using PPIs to drive OHS activities

The systematic management of OHS

1.4.1 The *National OHS Strategy 2002-2012*, which forms a framework for the sustained and continuous improvement in Australia's occupational health and safety performance over the next decade, advocates that all workplaces adopt a systematic approach to OHS risk management as part of their daily business operations.

1.4.2 This systematic approach stems from a need that, in order to improve the level of OHS performance, the focus of OHS management has to shift from a peripheral position to one of total integration into an organisation's management systems. For this to occur, managers must see good OHS performance as a critical part of good sustainable business practice. To achieve this, a reliable system for OHS performance measurement, in terms of evaluating the systematic management of health and safety in the workplace, will need to be developed and used. This is the role of PPIs.

1.4.3 It should be noted that, unless an organisation has a systematic approach to the management of OHS, and in particular to the planning of prevention activities, then PPIs will be of little assistance.

1.4.4 This 'systematic approach' can take many forms but usually consists of a number of key elements that together are often referred to as an occupational health and safety management system (OHSMS). There are many variations of OHSMS in use, but all have the following principles:

- commitment and policy
- planning
- implementation
- measurement and evaluation, and
- review and improvement.

1.4.5 As the format of an OHSMS will be based on the core functions of an organisation, and be appropriate to the specific needs of that organisation, the type and complexity of the OSHMS in place may range from highly developed systems that are independently audited against a formal standard for certification, to less structured informal management processes that are not regularly reviewed. Many small to medium enterprises (SMEs) with limited access to OHS resources are likely to have a basic management system, or no formal management system at all.

1.4.6 In all cases the systematic management of health and safety at work should have the process of risk management principles at its core. That is, the identification of hazards, assessing the risk associated with those hazards and applying measures to control the risks, should form the focus of OHS management effort in any organisation, irrespective of its size. Other important components in an OHSMS include responsibility and accountabilities of key staff, competencies for managers and staff, policies and procedures, emergency preparedness, monitoring and review, and plans for continuous improvement.

1.4.7 Accordingly, it follows, that the type of OHSMS that an organisation has in place, and the nature of the risks that it needs to control, will ultimately determine the types of performance measures that it will need to develop to evaluate the effectiveness of that system.

Categories of PPIs

1.4.8 While individual PPIs will need to reflect the characteristics of the OHS problems and strategies applying to particular industries, organisations and workplaces, there are a number of core categories of PPIs that are common to most large organisations. For the purposes of this guidance, the categories of PPIs outlined below represent those principles and elements incorporated into the OHSMS model for continuous improvement.

- **Commitment and policy** – measures demonstrated commitment to improve OHS performance
- **Planning** – measures what procedures are in place to eliminate workplace injury and disease
- **Implementation** – measures the capability and support mechanisms that are necessary to achieve OHS objectives and targets
- **Measurement and evaluation** – measures the extent to which workplace health and safety is monitored and evaluated so that issues can be identified and corrective action taken, and
- **Review and improvement** – measures the effectiveness of the OHS management system, and its continuing suitability.

1.4.9 These PPI categories are not considered to be the definitive set, and organisations may wish to use alternative categories that follow more closely the elements in their own OHSMS. Within each of the above core categories there are a number of sub-categories. Examples of these are provided at **Appendix 1**.

Categories of PPIs – Small Business

1.4.10 Small business may also wish to measure their OHS performance using PPIs. In recognition of the needs and limited resources of small business, an alternative example of core categories, of PPIs is provided below. These indicators[2] reflect processes designed to maintain a high level of OHS.

- **risk management** – workplace hazards are identified and associated risks eliminated or controlled
- **management of work processes** – safe systems of work implemented
- **participation, communication and skills** – employees are trained and educated and are actively involved in problem solving
- **planning, design and procurement** – OHS is addressed in the design, planning and procurement phases and activities of the project, and
- **monitoring and review** – OHS is self-assessed and/or independently audited for effectiveness of systems and practices.

When selecting PPIs, choose a range of indicators to cover all of the categories listed above. Within each of the above categories there are several sub-category examples of which are provided at **Appendix 2**. In addition, further information on useful resources available for use by small business, is provided at **Appendix 3**. This includes tools and checklists that may be used in the identification and control of workplace hazards.

Selection of PPIs

1.4.11 More information on the selection and use of PPIs will be provided in Part 2 of this document, but in general the following issues need to be considered when selecting PPIs:

a) The categories of PPIs should reflect the elements of the OHSMS (or in the case of small business, the processes designed to maintain a high level of OHS) in any specific workplace, and should measure the most significant risks in the workplace. It is 'what matters most' that should be measured. In addition, it should include at least:

- hazard identification
- risk exposure
- risk control measures, and
- attainment of competencies in OHS by managers and staff.

b) The types of PPIs selected, as outlined in the adapted Quality Model for Process Improvement at page 6, should also reflect the needs and priorities of the organisation. For example, INPUT PPIs can be used as a measure to ensure that commitment and effort continues as planned. PROCESS PPIs can be used to monitor key risks, and OUTPUT PPIs can be used to measure progress towards specific goals.

c) Organisations should avoid selecting too many PPIs. The task of collecting information on a large number of indicators may result in an evaluation system becoming unworkable. It is better to start with a small number of PPIs and develop additional measures as the OHSMS matures.

1.4.12 Studies in industry have demonstrated that PPIs can effectively be used to monitor and promote implementation of an OHSMS and achieve improvements in OHS outcomes. In addition, they may form the basis for evaluating the effectiveness of individual OHS management strategies where OHS objectives, management plans and expected outcomes are defined (Simpson, 2001).

1.4.13 Additional information on OHS performance measurement is provided at **Appendix 4**.

[2] The categories of PPIs were developed by NOHSC for the construction industry. The five categories were agreed as being applicable to the wider industry at a workshop. Extending the Use of Positive Performance Indicators in Australian Industry, held in March 2002.

PART 2
DEVELOPING AND USING POSITIVE PERFORMANCE INDICATORS

Key Points

Risk Profile

Step 1 – Develop a risk profile for the organisation and/or identify OHS outcomes of concern

Step 2 – Review current arrangements for managing OHS to identify areas for improvement

Step 3 – Define key OHS outcomes that are to be achieved within set timeframes

Develop PPIs

Step 4 – Develop core PPIs based upon the areas of focus for improvement

Step 5 – Ensure that the selected PPIs meet relevant essential criteria

Step 6 – Determine how each PPI is to be collected, calculated and frequency of reporting

Measure and Report

Step 7 – Conduct performance measurement using selected PPIs

Review

Step 8 – Monitor and Review

STEPS TO DEVELOPING PPIs

Risk Profile

2.1 Step 1
Develop a risk profile for the organisation and/or identify OHS outcomes of concern

2.1.1 This step aims to identify and quantify the level of risk, personal injury and disease to which persons in the workplace may be exposed. Many organisations with well-developed OHS management systems undertake detailed hazard audits and risk assessments, and have well-documented risk profiles. For those organisations wishing to undertake such detailed audits and assessments, there are a number of practical tools (see **Appendix 4** and References) available. In addition, state/territory OHS regulatory authorities may also provide useful information on this process.

2.1.2 For small businesses with limited access to OHS resources, a basic risk profile can be developed through the consideration of such things as the location of the workplace, the occupational grouping and age profile of employees, the work activities and the equipment, tools and materials used. From this information, an organisation can readily identify the nature and severity of workplace hazards that need to be controlled.

2.1.3 The process of establishing a risk profile should involve employees at all levels. This is consistent with the principles of the *National OHS Strategy 2002-2012* requiring the cooperation and commitment of all workplace parties to consult on workplace health and safety, and for identifying OHS issues and initiating preventative action. Those persons working with hazards on a day-to-day basis are often those most able to identify them.

2.1.4 In addition to developing a risk profile for the organisation, OHS outcomes of concern that the organisation wishes to address need to be identified. Such outcomes are likely to be incidents that have occurred in the recent past such as fatalities, injuries, occupational diseases and near-miss incidents. In some organisations with well-developed management systems, comprehensive incident data may be available from their own records.

2.1.5 In those organisations with only a small workforce, incident records may be basic or non-existent, and these organisations may wish to review published incident data for their particular industry and occupational groups to ascertain the types of incidents that might occur within their workplace. This information may be obtained from employer and employee associations, and from state/territory and Commonwealth OHS authorities.

Other useful tools to help you in developing a risk profile

- **Australian Bureau of Statistics**
  Australian and New Zealand Standard Industrial Classification (ANZSIC) – 1993.

  Identifies groupings within Australian industry and outlines some of the main activities that these groups undertake, which can provide an indication of risk within these industries.

- **Australian Bureau of Statistics**
  Australian Standard Classification of Occupations (ASCO) – 1997.

  Identifies occupational groups within Australian industry and outlines some of the main work tasks undertaken by these groups, which can provide an indication of risk within these occupations.

- **Australian Safety and Compensation Council**
  Type of Occurrence Classification System (1999).

  Can be used to identify exposures and circumstances that may cause, or be associated with, injury and disease at work (Mechanism of Injury and Agency of Injury).

- **Australian Safety and Compensation Council**

  The National Workers' Compensation Statistics Database can be used to identify injury trends within industry groups and occupations.

2.2 Step 2
Review current arrangements for managing OHS to identify areas for improvement

2.2.1 Once the outcomes of concern in the workplace have been established, and the type and nature of workplace hazards identified, an appraisal should be undertaken to examine if and how those risks are currently being managed.

2.2.2 Where a systematic approach is adopted, this usually consists of a number of key elements that together are often referred to as an occupational health and safety management system (OHSMS). More detailed information on the OHSMS has been provided in sections 1.4.1 - 1.4.7.

2.2.3 It is essential that each organisation undertakes a review of its OHSMS to identify areas for improvement.

This review should consider the following key issues/questions:

- What do we have in place?
- What do we need to do next?
- How do we do it?

Useful tools to help you review your current OHS management arrangements:

- *AS/NZS 4804 – Occupational health and safety management systems – General guidelines on principles, systems and supporting techniques* – Standards Australia/Standards New Zealand (2001). General guidance standard on OHSMS.
- *SafetyMAP – Auditing Health and Safety Management Systems – 4th edition*, Victorian Workcover Authority (2002).
- *Occupational Health and Safety Management Systems – A guide to AS 4801 for small business.* Standards Australia, 2001.

2.3 Step 3
Define key OHS outcomes that need to be achieved within set timeframes

2.3.1 The next step is to establish a number of key OHS outcomes that are to be achieved within set timeframes. These outcomes will become the goals towards which the health and safety effort will be directed.

2.3.2 In addition to these key OHS outcomes, goals that clearly articulate the desired results need to be developed along with a strategy for implementing them. Goals may also be established:

a) in large organisations in regional or local level operational plans, where goals are developed from higher level OHS strategic plans. These goals, although consistent with the higher level plan, should be developed to reflect local priorities, or

b) to direct special OHS initiatives (e.g. introduction of wellness programs etc.).

Develop PPIs

2.4 Step 4
Develop core PPIs based upon the areas of focus for improvement

2.4.1 Having defined the key OHS outcomes and goals to be achieved in the management of OHS in the organisation, both the nature of the prevention activities to be undertaken, and the manner in which these are to be measured will need to be determined.

2.4.2 In terms of defining the nature of the activities to be undertaken, these are the interventions or positive initiatives that are aimed at creating a safe situation. Much information is available in relation to implementing such initiatives, and is contained in various publications such as standards, codes, guidance notes, fact sheets and general information. This information is provided by Commonwealth, state and territory OHS authorities, employer and employee associations and industry groups.

2.4.3 In order to effectively measure these interventions, it is suggested that an organisation consider both the **types** of performance indicators (refer Sections 1.3.3 - 1.3.7) and **core categories** of PPIs (refer Sections 1.4.8 - 1.4.10). In order to do this, work backwards from the goals to identify which

elements of the OHSMS, or other processes designed to maintain a high level of OHS, efforts need to focus, and where in the management process (upstream/downstream) there is a need to act. These will be the areas of focus for improvement, and each area of activity will have an appropriate OHS performance measure (core category PPIs). It is likely that an organisation will develop a mix of PPIs across both PPI type and category, and these will be relevant to the specific needs and priorities of each individual workplace.

2.4.4 To assist in the task of developing suitable PPIs, a worksheet comprising a matrix combining the categories of PPIs and the Quality Model for Process Improvement is provided in **Appendix 5** and **Appendix 6**.

2.5 Step 5
Ensure that the selected PPIs meet relevant essential criteria

2.5.1 In order to be useful and effective, selected PPIs should be:

- an accurate measure of the area of interest
- able to be measured objectively
- easily understood by all persons that are required to use them
- relatively simple and cost-effective to collect
- able to be reproduced consistently over time, and
- a timely measure of performance.

2.5.2 As PPIs will tend to be specific to an organisation, and are more focused on areas of risk and/or specific OHS goals, once established they need not necessarily be ‘set in concrete’ for long periods of time. Rather, they might be under constant review to remain relevant to the needs of the organisation. For example, in construction, different PPIs may be used during different stages of a major project on the same site.

2.5.3 To enable a more comprehensive overview of health and safety management performance and assist the search for the underlying causes of work-related injury and illness, it is important that a balanced mix of both outcome indicators and PPIs to effectively measure OHS performance are used (refer to Section 1.3).

2.6 Step 6
Determine how each PPI is to be collected, calculated and frequency of reporting

2.6.1 Methods for collecting PPI data will vary between organisations depending on specific needs. Some of the data for a particular PPI, such as training records or maintenance records, may be part of another component in the business management system.

2.6.2 An important consideration when choosing a collection method is the reliability of the data, and who will have the responsibility of collecting the data.

2.6.3 Some common methods of collecting PPI data involve the use of staff questionnaires and surveys, interviews, direct observations and the examination of records.

2.6.4 For each of the PPIs developed, the frequency and method of reporting will need to be determined. Some PPIs will need to be collected, analysed and reported on a daily basis, others weekly or monthly. Aggregate data will tend to be reported and analysed on a quarterly or annual basis.

Measure and Report

2.7 Step 7
Conduct performance measurement using selected PPIs

2.7.1 Having completed the above steps, the next step is to carry out performance measurement, using selected PPIs, analysing and recording the data and providing reports and feedback to management and employees. However, prior to undertaking performance measurement, all affected employees should be provided with information why such an activity is being undertaken, what PPIs have been selected, what is being measured and the method of collecting data.

Review

2.8 Step 8
Monitor and review

2.8.1 The organisation's OHS performance, the strategies that have been implemented to improve its performance and the effectiveness and relevance of the PPIs selected need to be periodically monitored and reviewed. As part of continuous improvement, appropriate measures should be taken to address any issues identified during this review.

Appendix 1
Examples of performance indicators against each of the OHS management system core categories

PPI CATEGORY	PPI IN THIS CATEGORY MEASURE:	PERFORMANCE INDICATORS	HOW TO MEASURE
COMMITMENT AND POLICY	Demonstrated commitment to improve OHS performance.	• Evidence of OHS policy statement signed by CEO • Frequency and quality of OHS reporting by or to Senior Management • Senior managers' performance appraisals include OHS • Percentage of workforce and contractors covered by consultation processes and OHS representation • Rating of effectiveness of employee participation in OHS management	Employee questionnaire/ survey Examination of records
PLANNING	Procedures established to eliminate workplace injury and disease.	• Operating procedures are developed and relevant • The extent to which an organisation requires risks to be managed using a process of hazard identification, risk assessment and control • Extent to which health and safety information is accessible to employees • Extent to which purchasing guidelines and contracts include specific health and safety requirements (for the delivery of the goods or services)	Employee questionnaire/ survey Examination of records
IMPLEMENTATION	Capability and support mechanisms that are necessary to achieve OHS objectives and targets.	• Percentage of workplace inspections conducted over a specified timeframe • Percentage of high risks identified over a specified timeframe • The proportion of items identified through safety walks and inspections that are repeat items measured over a specified timeframe • The proportion of reported incidents that do not result in injury compared with those that do, over a specified timeframe • Percentage of planned management visits conducted over a specified timeframe • Percentage of managers and employees that have received OHS training (eg. induction, job-specific, hazard management, emergency procedures)	Observation – walk through inspections/audits Examination of hazard reports Examination of hazard logs Review of maintenance log Analysis of accident and incident reports
MEASUREMENT AND EVALUATION	The extent to which workplace health and safety is monitored and evaluated so that issues can be identified and corrective action taken.	• The extent to which health and environmental monitoring is undertaken and records are maintained and evaluated • Extent to which accident and incident records are maintained and evaluated to identify trends • Extent to which corrective action is taken to address identified issues	Employee questionnaire/ survey Examination of records
REVIEW AND IMPROVEMENT	The effectiveness of the OHS management system, and its continuing suitability.	• Percentage change in internal or independent OHS management system audit over a specified period of time	Management system audits Examination of records

Appendix 2
Small Business Examples of Performance Indicators Against Each of the Core Categories

PPI CATEGORY	PPI IN THIS CATEGORY MEASURE:	PERFORMANCE INDICATORS	HOW TO MEASURE
RISK MANAGEMENT	The extent to which workplace hazards are identified and associated risks are eliminated or controlled.	• Percentage planned risk assessments completed • Percentage of reported incidents investigated • Percentage of planned workplace inspections completed	Observation – walk through inspections/audits Examination of hazard reports/hazard logs Examination of maintenance log Examination of accident/incident reports
MANAGEMENT OF WORK PROCESSES	The extent to which established safe systems of work are actually implemented.	• Percentage of risk assessment recommendations completed • Percentage of workplace inspection recommendations completed • Percentage of incident investigation recommendations implemented	Observation – walk through inspections/audits Examination of hazard reports/hazard logs Examination of maintenance log Employee questionnaire/survey
PARTICIPATION, COMMUNICATION AND SKILLS	The extent to which the working environment provides people with opportunities and capabilities to effectively contribute to OHS management. The extent to which they are actively involved in problem solving and decision making and receive education and training.	• Employee perception of management commitment • Rating of the effectiveness of OHS communication at toolbox/work meetings • Rating of the effectiveness of employee participation in OHS management (including involvement in the OHS committee) • Percentage of employees that have received adequate OHS training • Percentage of managers that have received OHS training	Employee questionnaire/survey Examination of records
PLANNING, DESIGN AND PROCUREMENT	The extent to which OHS is addressed in the design, planning and procurement phases and activities of the project.	• Percentage of contracts with OHS clauses • Number of instances where procurement decisions are based on OHS considerations over the life of the project • Number of instances where design changes are made to address identified OHS issues over the life of the project	Employee questionnaire/survey Examination of records
MONITORING AND REVIEW	The extent to which OHS is self-assessed and/or independently audited for effectiveness of systems and practices.	• Percentage of workplace inspections undertaken • Percentage change in overall ranting over a specified timeframe	Workplace inspections/audits Examination of records

Appendix 3
Additional Information for Small Business

The information in this appendix provides details on additional resources, on occupational health and safety, available for use by small business. This includes tools and checklists that may be used in the identification and control of workplace hazards.

Australian Chamber of Commerce and Industry, *Small Business Safety Solutions*, 2004. Provides guidance on basic OHS activities that owners/managers of small businesses should be undertaking in order to effectively manage health and safety in the workplace.

ACT Workcover, *Small Business Health and Safety Toolkit*, 2004.
Available at **workcover.act.gov.au/edupromo/10Steps2Safety.html**

This toolkit will help start the process of controlling or eliminating risks and establishing safe systems of work. It has been developed specifically with the needs and limited resources of small business in mind and it provides the essential steps to effectively manage safety.

Department of Consumer and Employment Protection, Western Australia, *The First Step - managing safety and health hazards in your workplace,* and ***The Next Step – systematically managing safety and health hazards using WorkSafe Plan, 2003***.
Available at **safetyline.wa.gov.au/pagebin/edcngenl0110.htm**

These two booklets provide the information to get started with identifying all the things that could lead to injury or harm to the health of employees. They explain some common hazards found in most workplaces, and then shows how to spot the hazards, assess the risk and make changes and, having taken those first steps, assess how effectively hazards are managed the workplace.

NSW Workcover Authority, Small Business Assistance Strategy, 2003.
Available at **workcover.nsw.gov.au/workcover/small_business_site/home.asp**, email **contact@workcover.nsw.gov.au**

NSW employers are required to identify foreseeable workplace hazards, assess the risk of harm from those hazards, then eliminate or control the risks. The Strategy helps small businesses meet these obligations with free advice, a Safety Checklist. The six checklists in this kit are designed to help you evaluate how well you are currently managing safety in your workplace. They will help you identify the safety risks in your workplace and suggest how to make your workplace safer.

NSW Workcover Authority, *Advice and assistance for small to medium business*.
Available at **workcover.nsw.gov.au/workcover/small_business_site/home.asp**

To ensure that small to medium sized businesses receive the knowledge and assistance they need to make their workplaces safe, WorkCover has established the Business Assistance Unit (BAU) - a specialised group dedicated to supporting your business.

NT WorkSafe, *Safety Management – A Guide*, 2003.
Available at **nt.gov.au/deet/worksafe/corporate/publications/pub0002.pdf**

This guide is aimed at small business and incorporates self assessment questions to assist an organisation to assess their level of compliance. NT WorkSafe officers conduct audits against the elements of this guide and provide a report to the employer with recommended actions.

NT WorkSafe, Bulletin WH 09.01.05, Legislation – contractor accreditation OHS requirements, 2005.
Available at **nt.gov.au/deet/worksafe/corporate/bulletins**

This bulletin provides advice for small businesses about the occupational health and safety requirements for registration with the Northern Territory's Contractor Accreditation Limited.

Queensland Department of Industrial Relations, *Managing Health and Safety in Small Business*, 1998.
Available at **whs.qld.gov.au/brochures/bro021v2.pdf**

This brochure identifies the health and safety issues small business operators need to consider.

More OHS information for Queensland employers is available through **whs.qld.gov.au/employers/index.htm**

Worksafe Victoria, *Small Business Safety Assistance Program*, 2003.
Available at **workcover.vic.gov.au/vwa/home.nsf/pages/so_smallbus_newintro**

This program helps small businesses in Victoria evaluate and minimise the risks of injury and claims in their workplace. It includes self-assessment checklists, access to free safety advice, a safety action plan, a list of small business specific resources and contacts for more assistance.

Workplace Standards Tasmania, *Making your Small Business Safer and Healthier*, 2004.
Available at **workcover.tas.gov.au/attach/gb148makingy.pdf**

This guide provides practical information and tools that are useful to a small business including sample checklists and charts for use in the workplace.

WorkSafe Western Australia, *The ThinkSafe Small Business Assistance Program*, 2005.

WorkSafe provides up to three hours of free safety and health advice to small businesses (less than 20 employees) in the following high-risk industry areas:

- Agriculture, Forestry and Fishing
- Construction
- Health and Community Services
- Manufacturing
- Retail and Wholesale, and
- Transport and Storage.

WorkSafe arranges for an independent occupational safety and health consultant to visit workplaces and prepare a simple safety action plan.

Appendix 4
Additional Information on OHS Performance Measurement

The information in this appendix contains resources providing more detailed background on the measurement of occupational health and safety performance, and on positive performance indicators.

Claros Consulting – *Health and Safety Indicators For Institutional Investors – A report to the Health and Safety Executive*, UK Health and Safety Executive, 2002.

Comcare, *Positive Performance Indicators - Measuring Safety, Rehabilitation and Compensation Performance*, Commonwealth of Australia, 2003.

Minerals Council of Australia – *Positive Performance Measures – A Practical Guide*, Minerals Council of Australia, (undated).

National Occupational Health and Safety Commission, *Guidance on OHS Reporting in Annual Reports*, Commonwealth of Australia, 2004.

National Occupational Health and Safety Commission, *National OHS Strategy 2002-2012*, Commonwealth of Australia, 2002.

National Occupational Health and Safety Commission, *Occupational Health and Safety Management Systems – A review of their effectiveness in securing healthy and safe workplaces*, Commonwealth of Australia, 2001.

National Occupational Health and Safety Commission, *OHS Performance Measurement in the Construction Industry – Development of Positive Performance Indicators*, Commonwealth of Australia, 1999.

National Occupational Health and Safety Commission, *Positive Performance Indicators, Beyond Lost Time Injuries, Part 1 – Issues*, Commonwealth of Australia, 1994.

National Occupational Health and Safety Commission, *Positive Performance Indicators, Beyond Lost Time Injuries, Part 2 – Practical Approaches*, Commonwealth of Australia, 1994.

National Occupational Health and Safety Commission, *Safe and Sound: A Discussion Paper on Safety Leadership in Government Workplaces*, Commonwealth of Australia, 2004.

TelstraCare, *Measuring Health and Safety Performance* – Guidebook, Telstra, 2001.

Workcover Authority of New South Wales, *Occupational Health and Safety Reporting – Guidelines for reporting OHS in annual reports*, NSW (undated).

Appendix 5
Categories of PPI and Quality Model for Process Improvement Matrix

CATEGORIES OF PPI	INPUTS (Key Activities)	PROCESSES (Monitoring Key Risks)	OUTPUTS (Milestone progress towards goals)	GOALS	TARGETS
COMMITMENT AND POLICY (Demonstration of a commitment to improve OHS performance)					
PLANNING (Procedures established to eliminate workplace injury and disease)					
IMPLEMENTATION (Capabilities and support mechanisms that are necessary to achieve OHS objectives and targets)					
MEASUREMENT AND EVALUATION (The extent to which OHS activities are monitored, evaluated and corrective actions taken)					
REVIEW AND IMPROVEMENT (The operation of the OHSMS and its continuing suitability to prove effective)					
	Commitment and Effort	***Used to Monitor Key Risks***	***Achievement of Objectives***	***Key OHS Outcomes***	

Appendix 6
Categories of PPI and Quality Model for Process Improvement Matrix – Small Business

CATEGORIES OF PPI	INPUTS (Key Activities)	PROCESSES (Monitoring Key Risks)	OUTPUTS (Milestones progress towards goals)	GOALS	TARGETS
RISK MANAGEMENT (Extent to which workplace hazards are identified and associated risks eliminated and controlled)					
MANAGEMENT OF WORK PROCESSES (Extent to which established safe systems of work are actually implemented)					
PARTICIPATION, COMMUNICATION AND SKILLS (Extent to which the working environment provides people with opportunities and capabilities to effectively contribute to OHS management.					
PLANNING, DESIGN AND PROCUREMENT (Extent to which OHS is addressed in the design, planning and procurement phases and activities of the project)					
MONITORING AND REVIEW (Extent to which OHS is self-assessed and/or independently audited for effectiveness of systems and practices)					
	Commitment and Effort	*Used to Monitor Key Risks*	*Achievement of Objectives*	*Key OHS Outcomes*	

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CANBERRA CITY ACT 2601

PO Box 224
CIVIC SQUARE ACT 2608

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Fax: (02) 6205 0797
workcover.act.gov.au

COMCARE AUSTRALIA (AUSTRALIAN GOVERNMENT)
Level 1
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GPO Box 9905
CANBERRA CITY ACT 2601

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comcare.gov.au

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SAFEWORK SA

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Fax: (08) 8999 6260
nt.gov.au/deet/worksafe

Glossary of Terms

Audit	A systematic examination against defined criteria to determine whether activities and related results conform to planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve the organisation's policy and objectives.[1]
Benchmarking	The continuous process of measuring and comparing products, services and practices with similar systems or organisations both inside or outside the industry for continual improvement.[2]
Continuous improvement	Process of enhancing OHSMS, to achieve improvements in overall OHS performances, in line with the organisation's policy.[1]
Control of risks	The process of elimination or minimisation of risk.[1] Risk control is that part of risk management which involves the implementation of policies, standards, procedures and physical changes to eliminate or minimise adverse risks.[3] Risk reduction is a selective application of appropriate techniques and management principles to reduce either the likelihood of occurrence (incident) or its consequences.[3]
Hazard	A source of potential harm or a situation with a potential to cause loss.[3]
Hazard identification	The process of recognising that a hazard exists and defining its characteristics.[1]
Incident	Any unplanned event resulting in, or having potential for, injury, ill-health, damage or other loss.[1]
Loss	Any negative consequence, financial or otherwise.[3]
LTIFR	Lost time injury frequency rate – the number of lost-time injuries per million hours worked.
Monitor	To check, supervise, observe critically, or record the progress of an activity, action or system on a regular basis in order to identify change.[3]

OHSMS	Occupational Health and Safety Management System which is a combination of the planning and review, the management organisational arrangements, the consultative arrangements, and the specific program elements that work together in an integrated way to improve health and safety performance.[4]
Organisation	A company, corporation, firm, enterprise or other legal entity or part thereof, whether incorporated or not, public or private, that has its own function(s) and administration.[1]
Outcome	Results that may or may not have been intended that occur as a result of a service or intervention.[2]
Risk	The chance of something happening that will have an impact upon objectives. It is measured in terms of consequences and likelihood.[3]
Risk management	The culture, processes and structures that are directed towards the effective management of potential opportunities and adverse effects.[3]
Safety	A state in which the risk of harm (to persons) or damage is limited to an acceptable level.[1]
System	An interdependent group of items forming a unified whole.[5]
Workplace	Any place, including any aircraft, ship or vehicle, where a person works, or is likely to work, and includes any place where a person goes while at work.[6]

[1] Australian/New Zealand Standard 4804 – *Occupational health and safety management systems – General guidelines on principles, systems and supporting techniques*

[2] Australian Council on Healthcare Standards

[3] Australian/New Zealand Standard 4360 – Risk Management – *General guidelines on principles, systems and supporting techniques*

[4] Gallagher, C. (2000).

[5] Macquarie Dictionary

[6] National Guidelines for Inegrating OHS competencies into National Industry Competency Standards [NOHSC:7025 (1998)]

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