Modules 9-12

Plant

Statement

The term *plant* applies to a wide range of items, extending from complex installations such as a mechanical ventilation system to portable equipment and tools (e.g. screwdrivers, hammers) that may be moved or carried from one place to another. Plant includes:
- machinery, equipment, appliances, pressure vessels, implements and tools;
- personal protective equipment (PPE), i.e. safety boots, gloves, hearing, respiratory and eye protection;
- plant specified in Schedule 2 of the *Workplace Health and Safety Act 1995*, e.g. airconditioning units, lifts;
- a component of plant and a fitting, connection, accessory or adjunct to plant.

Some plant common to school environments includes hoists, lathes, drills, tractors, chainsaws, vacuums, photocopiers and pool filtration.

Background information

What health and safety issues are relevant to plant?

There are hazards associated with different pieces of plant, which may include moving parts, in-running entrapment points, energy source, static electricity, fire, explosion, noise, vibration, radiation, release of substances, stability, operating controls and lighting.

Why do these health and safety issues require consideration?

Each hazard associated with pieces of plant has a different effect on a person's health and safety, e.g. scarring, burns, impairment of senses, loss of limbs, psychological trauma. If plant hazards are identified and appropriately controlled, injury and illness to employees, students and others can be avoided.

Why is regular inspection of plant important?

Consideration should be given to the risks associated with plant as a result of wear and tear, corrosion, loose or worn plant parts that overload the design specifications or may no longer be effective and plant parts that have been damaged because of breakdown or misuse.

Regular inspection is one of the best tools available to identify plant hazards and assess any associated risks **before** accidents occur. Inspection can accomplish the following:
- identifying potential problems that were not foreseen during plant design or task analysis;
- identifying deficiencies in the plant or the equipment associated with the use of the plant. Among the basic causes of problems are normal wear and tear, corrosion and damaged plant parts;
- identifying employee actions associated with the use of plant, which can identify poor work practices;
- identifying the effect of changes in processes or material associated with plant. Changes may occur gradually, and produce a different outcome from that originally assessed;

- identifying inadequacies in control measures that have been implemented previously.

An **inspection program** should be developed and implemented for plant. This program should address issues such as:
- the technical and/or manufacturers' standards against which plant should be inspected;
- the frequency of inspections;
- critical safety instructions, such as the isolation procedure, to be applied during inspection;
- the procedures to be followed when:
  — carrying out periodic inspections;
  — carrying out specific tests;
  — repairing plant;
  — inspecting repaired plant;
  — inspecting modified plant;
  — inspecting re-rated plant;
- the procedures to be followed when investigating and reporting to the employer any variations from normal operation or dangerous occurrences.

What is the importance of routine plant maintenance?

Through proper maintenance you can prevent plant from deviating from its design's intention in a way that is a risk to health and safety.

Plant should be maintained according to the manufacturer's specifications for maintenance or, in the absence of such specifications, in accordance with other proven and tested procedures.

Plant should be isolated before maintenance commences. Where plant is isolated for maintenance and the plant will be shut down, any total or part shutdown should not allow a hazardous situation to be created.

Where plant cannot be isolated, there should be alternative means of preventing inadvertent operation. In these situations, work should be conducted under controlled procedures to allow for maintenance, for example:
- A controlled access permit into maintenance areas should be used.

- Another person should be stationed at the controls of the plant and an effective means of direct communication should exist between the person carrying out maintenance and the person stationed at the controls. Other precautions should be adopted where direct communication is not possible.
- All forms of safeguarding should be replaced before start-up of plant.

What is the importance of the Advisory Standard (Code of Practice) for Plant?

Advisory Standards provide practical guidance to employers, principal contractors, owners, occupiers, employees or any other person on whom there may be **obligations** under the *Workplace Health and Safety Act 1995*.

Generally, an Advisory Standard contains guidelines and methods of work, which, when followed, allow employers and employees to achieve minimum health and safety standards at the workplace. Advisory Standards are designed to be used and understood by everyone in the workplace.

Advisory Standards may be used in legal proceedings as evidence of workplace risks being managed reasonably and diligently. It is a defence in a legal proceeding for a person to prove that they adopted and followed the advice and guidance provided in an Advisory Standard. However, a court must be satisfied that the person exercised proper **diligence** in adopting and following the standard, i.e. it is not enough to simply have written procedures on file; these procedures must be diligently **implemented** to ensure the workplace health and safety of all relevant individuals.

Generally, if an Advisory Standard is followed, incidents should not occur; therefore, the occurrence of an incident is often clear evidence that the Advisory Standard was not followed and adopted.

Incidents frequently happen because procedures are not implemented.

The Advisory Standard (Code of Practice) for Plant sets out the obligations of designers, manufacturers, importers, suppliers and erectors of plant, as well as the obligations of employers, employees, non-employees and persons in control of plant. It discusses a number of hazards with plant at the workplace and outlines provisions for the prevention and control of plant-based risks within the risk management framework.

How do the Department of Education workplace health and safety curriculum guidelines relate to plant?

Workplace Health and Safety — Curriculum (HS–10) is a series consisting of a core document and various activity modules. The activity modules provide information, advice and guidance, which has the intention of helping teachers or leaders to make task assessments. A number of these modules set out health and safety issues associated with plant in the workplace. These modules include Office Machines and Equipment — including the use of computers, Business Ventures, Portable Power-generating Equipment, Agricultural Machinery, Woodworking, Electric Arc Welding, Gas Heating, Welding and Cutting, Fixed Machines, Portable Electrical Power Equipment, Operating Compressed-Air Equipment, Electrics and Electronics, Mechanics, Kilns, Jewellery, Lapidary, Cookery, Introduction of New Equipment, Process or Activity.

This information includes acceptable procedures and guidelines and minimum qualifications or certification requirements for teachers or leaders. The modules will help principals and teachers or leaders to make professional judgments in assessing whether they and their student groups can engage safely in a particular activity.

Further information

Legislation

Advisory Standard (Code of Practice) for Plant 1993 Queensland.

Advisory Standard (Code of Practice) for the Selection, Provision and Use of Personal Protective Equipment 1992 Queensland.

Advisory Standard for Noise 1999 Queensland.

Building Act 1975.

Building Code of Australia (Queensland Appendix) 1990.

Code of Practice for Safeguarding of Rural Plant 1992 Queensland.

Workplace Health and Safety Act 1995 Queensland.

Workplace Health and Safety (Miscellaneous) Regulation 1995 Queensland.

Workplace Health and Safety Regulation 1997 Queensland.

Education Queensland policies and guidelines

Workplace Health and Safety Guidelines — Curriculum (HS-10) 1994.

Occupational Health and Safety Policy (HS-07).

Accidents and Incidents — Reporting and Investigation (HS-08).

Other resources

Manufacturers' manuals.

Questions to answer

Suggested people to ask:

janitor/groundsperson; manual arts teachers; arts teachers; agricultural science teachers

Suggested questions to ask:

Have you been shown how to safely use the equipment that you work with? ☐ YES ☐ NO

Do you have access to information on workplace plant (e.g. manufacturers' manuals, code of practice for plant)? ☐ YES ☐ NO

Are there documented procedures for safely working with equipment? ☐ YES ☐ NO

How is the equipment in your workplace maintained? _____

_____

Who inspects and tests the equipment? _____

_____

Where are inspection and maintenance records kept? _____

_____

If there is a problem with the equipment, what do you do? _____

_____

For lists of registrable plant and registrable plant design, refer to Schedules 4 and 5 of the Workplace Health and Safety Regulation 1997.

Self-evaluation checklist Date completed: __ /__ /__   Completed by:

CONGRATULATIONS! Best methods practised for the selection, use and maintenance of plant.

5

BEST PRACTICE

Commitment to health and safety principles in the selection, use and maintenance of plant by:

purchasing plant that, by design, eliminates or minimises risk to health and safety ☐

incorporating plant-related workplace health and safety issues into the workplace's risk management strategies ☐

selecting, purchasing and installing plant that complies with workplace health and safety standards, codes of practice and guidelines ☐

ensuring reviews of control measures are done to monitor effectiveness ☐

4

GOOD PRACTICE

Developing processes for the continual review of safe work practices and monitoring of plant hazards by:

instructing new plant operators on safe plant operation and associated hazards ☐

developing processes for monitoring plant hazards and reviewing control methods ☐

reviewing safe work practices for particular plant on a regular basis or as processes/ equipment change ☐

developing processes to inform relevant staff members of changes to standards, regulations, codes of practice and guidelines ☐

assessing training needs as changes to plant/processes occur ☐

3

COMPLIANCE

Putting procedures for the selection, use and maintenance of plant into operation by:

maintaining up-to-date inspection, testing, maintenance and repair records for plant ☐

ensuring regular inspection, monitoring, testing and preventive maintenance of plant ☐

ensuring appropriate, visible signage to designate the work area to allow for adequate distance between machines ☐

ensuring that registrable plant is currently registered with the DWHS as required ☐

applying *Workplace Health and Safety Guidelines — Curriculum* in relation to plant in the learning environment ☐

providing information and training to staff, students and others in the correct use and maintenance of PPE ☐

providing PPE that complies with Australian Standards ☐

2

ACHIEVING COMPLIANCE

Promoting health and safety principles relevant to plant by:

establishing safe work practices to be followed by plant operators ☐

allocating and documenting responsibilities for the maintenance of plant ☐

discussing workplace health and safety issues in an appropriate forum ☐

maintaining records on identified plant hazards and details of actions taken ☐

identifying potentially hazardous plant and work practices, with walkthrough surveys and consultative processes ☐

providing instruction for new employees on safe plant operation and associated hazards ☐

encouraging staff attendance at relevant OH&S training and information courses ☐

1

INITIATING COMPLIANCE

Information available on health and safety issues relating to plant by:

getting manufacturer/supplier information on plant before buying, to aid decision making ☐

discussing possible hazards with colleagues and supervisors ☐

providing manufacturers' instructions/manuals to the users of plant ☐

making relevant workplace health and safety information about plant available ☐

ensuring *DOEM* policies and procedures are accessible to staff ☐

START

0

NON-COMPLIANCE

Are health and safety issues considered in the selection, use and maintenance of plant?

NO (rectify situation) ☐

YES (commence ticking in Compliance Level 1) ☐

For example:

• Manufacturers' manuals/instructions and *DOEM* policies and procedures are accessible.

• Information on health and safety issues relating to plant is available.

Self-evaluation checklist

Date completed: __ /__ /__   Completed by: _____

Workplace Environment

3 COMPLIANCE

Putting procedures for assessing workplace environments into operation by:

maintaining up-to-date records of inspections, testing, maintenance and repairs ☐

ensuring regular testing, inspection and maintenance of equipment/materials ☐

referring to appropriate information/advice services to determine the extent of hazards and possible control options ☐

ensuring regular monitoring of work areas for identified physical factors, e.g. dusts, gases, lighting, noise, vibration, temperature, ventilation ☐

assessing training needs as changes to the work environment occur ☐

providing training in the correct use and maintenance of personal protective equipment (PPE) ☐

providing appropriate PPE to staff, students and others ☐

developing a process whereby people can advise supervisors as soon as pain, discomfort, injury or illness occurs as a result of the work environment ☐

2 ACHIEVING COMPLIANCE

Promoting principles of work environment evaluations by:

establishing a process for feedback on the results of workplace evaluations ☐

consulting with your district office or other workplace health and safety personnel, if necessary ☐

maintaining records on identified work environment hazards and details of actions ☐

identifying potentially hazardous workplace conditions and work practices, through walk-through surveys and consultative processes ☐

encouraging staff attendance at OH&S training and information courses ☐

1 INITIATING COMPLIANCE

Information available on the process of evaluating workplace environments by:

obtaining manufacturer/supplier data on materials/equipment before purchase ☐

discussing possible hazards with colleagues and supervisors ☐

providing manufacturer instructions/manuals to the users of equipment/materials ☐

information relating to ergonomic principles being available ☐

ensuring *Department of Education Manual (DOEM)* policies and procedures are accessible to staff

0 NON-COMPLIANCE START

Are workplace environment factors considered?

NO (rectify situation) ☐

YES (commence ticking in Compliance Level 1) ☐

For example:
• Injuries/illnesses associated with the work environment are investigated.
• Information on good work environment conditions is available.
• DOEM policies and procedures are accessible.

CONGRATULATIONS! Best methods practised for the evaluation, design and review of the workplace environment.

5 BEST PRACTICE

Commitment to consultative practices by:

incorporating work environment evaluations into the workplace's risk management approach to health and safety ☐

regularly updating and reviewing job descriptions, generic position descriptions and selection criteria for the department to allow the recruitment of the most appropriate person for each job ☐

applying ergonomic design principles in the selection, purchasing and installation of equipment, furniture, fixtures and work surfaces ☐

4 GOOD PRACTICE

Developing processes for continual review and monitoring of work environments by:

incorporating basic ergonomic principles and information into inspection programs ☐

developing processes for monitoring hazards and reviewing control methods ☐

using workplace accident, incident and illness statistical trends as a means of directing attention to work environments that require assessment ☐

developing safe work/play practices for persons exposed to specific hazards ☐

Statement

The physical aspects of a workplace environment can have a direct impact on the productivity, health and safety, comfort, concentration, job satisfaction and morale of the people within it. Important factors in the work environment that should be considered include building design and age, workplace layout, workstation set-up, furniture and equipment design and quality, space, temperature, ventilation, lighting, noise, vibration, radiation and air quality.

Ergonomics is the study of the relationship between people, the equipment they use and the physical environment in which they work. Applying ergonomic principles to the design, modification and maintenance of workplace environments has a benefit on people's work performance and short- and long-term health and safety.

Background information

Why should we evaluate the workplace environment?

When people are working in situations that suit their physical and mental abilities, the correct fit between the person and the work task is accomplished. People are then in the optimum situation for learning, working and achieving, without adverse health consequences, e.g. injury, illness.

What work environment factors should be assessed?

When assessing the workplace environment, consideration should be given to individual **human characteristics** such as age, sex, experience, physical stature etc., and how well these human characteristics match the physical environment. Appropriate **design** of workplace environments will ensure that they accommodate a broad variety of human characteristics.

The work environment should satisfy the physical and mental requirements of the people who work within it. The necessary adjustments to the work area, in terms of the heights and angles of furniture and equipment, should be made for the comfort and safety of **each** person.

The four main categories of physical characteristic that need to be considered in the work environment are:
• **clearance**, e.g. headroom, legroom, elbow-room, access;
• **arm reach**, which has a bearing on storage of materials;
• **posture**, which has a bearing on the location of materials/equipment, heights of working surfaces;
• **strength**.

Physical environmental factors can have an adverse impact on people. The specific physical factors that limit performance will vary depending on both the work environment and individual differences. Those people who are working within an environment are the ones **best able** to identify factors that affect their work. It is important to involve these 'hands-on' people in consultations with supervisors, managers

and occupational health and safety personnel when considering options for controlling the risks in question.

The following environmental hazards may require consideration in your workplace:
• **Noise.** Excessive exposure to loud noise can irreversibly damage the ear, resulting in noise-induced hearing loss. 'Nuisance' noise can be annoying and distracting and result in reduced job performance and satisfaction. Noise may also be unsafe if it impairs communication in the work environment, such as by overpowering auditory alarms.
• **Lighting.** Lighting levels need to be appropriate to the task and **must** comply with Australian Standard 1680. Working in dim or overbright work environments can result in eyestrain, headaches, irritability and, inevitably, reduced productivity. Light sources, including the sun, can create unwanted reflections, glare and shadows in the workplace that can cause discomfort and distraction, and can interfere with the performance of visual tasks. Low levels of lighting can cause depression, which for some people may be severe.
• **Ventilation, air quality and thermal comfort.** Ventilation is important for the control of dust, fumes, gases, aerosols, climate and thermal comfort factors. Exposure to different types of dust can result in fibrosis of the lung, allergic reactions and asthma attacks. Various vapours, gases and aerosols have the ability to cause respiratory and skin damage. Extremes of heat can reduce concentration and motivation and cause a number of heat-related illnesses. Extremes of heat can also reduce tolerance to chemical and noise exposure and increase the risk of heart attacks.
• **Vibration.** Whole body vibration, e.g. from riding a mower, can affect comfort and performance even at low levels and can cause damage to the spine, stomach pain and gastrointestinal complaints. Hand-arm vibration, such as from hand tools, can have negative effects on muscles and the skeleton, and can contribute to carpal tunnel syndrome, low-back pain and vibration white finger, for example.
• **Radiation.** Exposure to ultraviolet radiation from the sun can induce potentially lethal skin cancers.

Exposure to direct sun, particularly between the hours of eleven and two, can result in sunburn, headaches and fatigue. Different people have varying degrees of sensitivity to the sun, e.g. fair freckled skin often burns more quickly than olive skin. Precautions for avoiding sun exposure should be followed diligently by **everybody**.

The work area should be set up according to ergonomic design principles. For each task, the following should be considered: frequency and flow of work; materials and equipment required; and the priority of different tasks. Basic guidelines to follow in the design of the work area to enable the efficient management of tasks include:
- **importance** — placing the most important items in the most advantageous or accessible locations;
- **frequency of use** — placing the most frequently used items within the easiest reach;
- **function** — materials and equipment with closely related functions should be grouped together;
- **sequence of use** — materials and equipment that are commonly used in sequence should be grouped together;
- **work/rest schedules** — work tasks should be varied to change body position and mental activities;
- **optimal positioning** — positioning materials and equipment to reduce physical hazards and increase usability, e.g. placing a document holder in front of a person, if it is viewed more frequently than the monitor, eliminating glare on computer screens by positioning monitors parallel to light fittings and at right angles to windows.

Who is responsible for assessing the work environment?

Each employee should be conscious of his or her health in their work environment and record any pain, discomfort, injury or illness that they believe is work-related. This information should be reported to supervisors as soon as possible to allow appropriate corrective action to reduce the risk to health and safety to be taken.

A determination then needs to be made whether the employee and/or supervisor can assess the situation with the available information, or whether information and advice needs to be sought from the district office.

How do we evaluate the workplace environment?

The risk management process is used to evaluate the workplace environment. This involves:
- **identifying** work environment hazards;
- **assessing the risk** of injury/illness from these hazards;

- **implementing** appropriate **control measures** to prevent or minimise the risks;
- **checking** that the control strategies are effectively controlling the risks.

To **identify** environmental hazards in your workplace, you can:
- consult with colleagues and supervisors about possible hazards;
- walk through the work site and record any hazards;
- analyse workplace incident, accident, injury and illness data;
- consult with specialist practitioners, industry associations, unions and government bodies.

In **assessing** the risks associated with the work environment, the following two factors should be considered:
- the **likelihood** of an incident, accident, injury or illness occurring because of the risk — a very high likelihood indicates controls may be necessary;
- the **severity** of the consequences if an incident, accident, injury or illness occurred because of the risk — if there were many fatalities, this would constitute extremely severe consequences.

If a hazard is determined to be a **risk** (based on likelihood of occurrence and severity of consequences), it is advisable to provide time, money and personnel resources to help prevent or minimise the risks.

The risk associated with each hazard can be **controlled** by implementing the following hierarchy of controls:
- **eliminating** the risk from the workplace, e.g. by removing hazardous playground equipment;
- **substituting** a material in the workplace environment with a less hazardous one, e.g. purchasing non-hazardous cleaning equipment, or replacing slippery floors with non-slip flooring;
- **redesigning** the workplace layout to reduce risks, e.g. rearranging furniture to allow easy access to materials and equipment;
- **isolating**, closing off or guarding a particular hazard in the work environment, e.g. keeping medicines in a locked cabinet;
- **administration** — adjusting the time and conditions of an individual's exposure to the risk, e.g. rotating tasks so that employees do not spend too long in hot or cold conditions, or too long performing a strenuous manual task;
- providing **personal protective equipment** as a last resort, when higher-order controls are not practicable, e.g. providing hearing protection, face shields and sunscreen for janitors/groundspersons using whipper-snippers and lawn mowers.

Further information

Legislation

Advisory Standard (Code of Practice) for Workplace Amenities Queensland.

Advisory Standard (Code of Practice) for the Selection, Provision and Use of Personal Protective Equipment 1992 Queensland.

Advisory Standard (Code of Practice) for Manual Tasks 1999 Queensland.

Advisory Standard for Noise.

Workplace Health and Safety Act 1995 Queensland.

Workplace Health and Safety (Miscellaneous) Regulation 1995 Queensland.

Workplace Health and Safety Regulation 1997 Queensland.

Education Queensland policies and guidelines

Occupational Health and Safety Policy (HS-07).

Standards

AS 1680.2.0-1990 Australian Standard, Interior Lighting — Recommendations for specific tasks and interiors.

AS 3590.1-1990 Screen Based Workstations, Part 1 — Visual Display Units.

Books and brochures

ACGIH 1994–1995, *Threshold Limit Values and Physical Hazards Booklet.*

Division of Workplace Health and Safety (DWHS) 1991, *Guidelines for the Safe Use of Visual Display Units*, Brisbane.

DWHS 1993, *An Asset for Office Work*, Queensland.

Grandjean, E. 1985, *Fitting the Task to the Man: An Ergonomic Approach*, Taylor and Francis, London.

Grantham, D.L. 1992, *Occupational Health and Hygiene Guidebook for the WHSO*, Brisbane.

Pheasant, S. 1991, *Ergonomics, Work and Health*, The MacMillan Press, London.

Worksafe Australia (NOHSC) 1989, *Guidance Note for the Prevention of Occupational Overuse Syndrome in Keyboard Employment.*

Other resources

Ergonomics Principles and Checklists for the Selection of Office Furniture and Equipment 1991, Ergonomics Unit, Worksafe Australia, NOHSC, AGPS, Canberra.

Ergo What? An Introduction to Ergonomics 1991, Safety Image Video, Oakleigh.

Recognition, Evaluation and Control of Hazards 1991, Safety Care Video, Brisbane.

User Checklist for Ergonomic Design of Adjustable Chairs 1991, Worksafe Australia.

User Checklist for Ergonomic Design of Foot Rests 1991, Worksafe Australia.

Questions to answer

Suggested people to ask:

janitors/groundspersons; manual arts teachers; art teachers; science teachers; home economics teachers; physical education teachers

Suggested questions to ask:

Are you aware of any environmental hazards in your workplace (e.g. noise, lighting)? ☐ YES ☐ NO

What health and safety issues have been identified in this workplace (e.g. UV radiation)? _____

Have you ever discussed these hazards with supervisors (e.g. tools being too noisy)? ☐ YES ☐ NO

Have you been shown how to work safely with regard to any environmental hazards? ☐ YES ☐ NO

Are you aware of any changes to the work environment, systems or practices that have been introduced to control these hazards? ☐ YES ☐ NO

Please list them. _____

Are you aware of any monitoring, testing or inspection practices in your workplace (e.g. electrical testing and tagging — please list)? ☐ YES ☐ NO

Training

Statement

Provision of instruction and training for employees is necessary to achieve competent, healthy and safe work performance. Employers have an obligation to ensure the workplace health and safety of all workers, and workers have an obligation to comply with instructions given for workplace health and safety by the employer. Instructions include training on safe work policies, procedures and practices.

All Queensland workplace health and safety advisory standards and other relevant supporting documents detail the importance of training in preventing or minimising risk to health and safety.

Training should cover all relevant workplace policies, procedures and practices and should incorporate employees' individual needs.

Background information

Who is responsible for ensuring training needs are met?

Management is responsible for the approval and allocation of training resources.

Who should receive occupational health and safety training?

All employees, including volunteers and others, should receive occupational health and safety training. Up-to-date training records should be kept for legal purposes, and to identify readily training needs. Staff training should generally include:
- general induction training;
- job-specific training, e.g. manual handling, hazardous substances, plant, noise, office ergonomics, accident reporting;
- refresher training as needed.

What should the training include?

To determine what the training content should be, training **needs** should be assessed. Means for assessing training needs should include:
- talking with employees about what they need to perform their work safely — this improves their acceptance of and compliance with the training;
- identifying the risk areas that require the most attention — this can be done by observing the tasks, liaising with other people in the district, and reviewing injury records.

What should the training objectives be?

Basic objectives should include:
- prevention/reduction of injuries based on the risk management approach of identifying, assessing, controlling, and reviewing;
- recognition and understanding of the work activities and their associated risks;
- promotion of healthy and safe work practices.

What should the training method be?

The most effective means of delivering the message needs to be carefully considered in terms of who the audience is, and how it will understand, learn and remember best. Consider discussions, posters, case studies, videos etc., and invite suggestions on preferred methods from the audience itself. The method must be based on the tasks employees perform in the workplace.

Evaluation, follow-up and review of training

- Training evaluation can be done with a feedback form, and by observing work practices for compliance with the training.
- A schedule of refresher training needs to be determined, because training is an ongoing process.
- Make changes to the training program as it progresses to improve its effectiveness and to ensure it reflects current legislative requirements.

Workplace health and safety officers and representatives (WHSOs and WHSRs)

If a workplace has thirty or more workers, the *Workplace Health and Safety Act 1995* requires there to be an accredited WHSO. To become an accredited WHSO, training with an accredited training provider must be successfully completed.

Workers may elect a WHSR on their own initiative or at their employer's suggestion. WHSRs are not required to have any experience or qualifications, but there are standard WHSR courses available, which WHSRs are recommended to complete to enable them to perform their role effectively.

Education Queensland has a list of preferred training suppliers for WHSO and WHSR training, who will tailor training courses specifically to departmental needs. These preferred suppliers are listed in this **Occupational Health and Safety Tool Kit**.

Further information

Legislation

Workplace Health and Safety Act 1995 Queensland.

Education Queensland guidelines and policies

Procedures for the Engagement and Use of External Consultants, September 1991.

Other resources

Employee records — accident/incident, sick leave reports.

External — Safe Work, National Safety Council.

Questions to answer

Suggested people to ask:
principals; registrars; WHSOs and WHSRs

Suggested questions to ask:

Have you received induction training? ☐ YES ☐ NO

What training specific to the workplace health and safety risks associated with your job have you received?

_____

_____

What other health and safety issues have you received training on? _____

_____

_____

What documentation is kept in relation to staff training? _____

_____

_____

How would you ask to participate in a training course? _____

_____

_____

Self-evaluation checklist

Date completed: ___ /___ /___   Completed by:

CONGRATULATIONS! Best methods practised for training procedures.

5 — BEST PRACTICE

Commitment to OH&S training requirements by:

implementing of health and safety training program guidelines and procedures ☐

regularly updating training programs ☐

monitoring changes to relevant legislation and including changes in programs ☐

documenting of training programs available to all staff ☐

providing available facilities for in-service training ☐

4 — GOOD PRACTICE

Development of OH&S training programs by:

evaluating the effectiveness of the program ☐

evaluating the knowledge and skills attained after completion of training ☐

establishing a process to target task-specific programs ☐

monitoring teacher training in relation to HS-10 ☐

establishing a process that allocates funding for training (e.g. WHSO training) ☐

3 — COMPLIANCE

Putting OH&S training programs into operation by:

meeting training needs and expectations among staff and students through consultation (e.g. office ergonomics, fire safety) ☐

prioritising staff needs for training ☐

coordinating training through in-service and other service providers ☐

allocating funds specifically for OH&S training ☐

including health and safety information in in-service induction programs ☐

2 — ACHIEVING COMPLIANCE

Promotion of OH&S training programs for all staff through:

visual notification for all staff (e.g. staff rooms, noticeboards, newsletters) ☐

consultation with all staff to verify methods to be used for notification of training programs ☐

establishment of a method for distributing funding for OH&S ☐

establishment of a standard for procedures that identifies training needs (refer to the *Department of Education Manual (DOEM)*, workplace health and safety Advisory Standards, manufacturers' guidelines, workplace health and safety literature) ☐

consultation with staff to assess in-service and external requirements ☐

1 — INITIATING COMPLIANCE

Information available to all staff defining training program needs by:

easy access to school handbook for all new staff ☐

consulting with health and safety committee/forum ☐

informal orientation for new staff ☐

informal staff discussions ☐

0 — NON-COMPLIANCE

START

Is information available for identifying and advertising training programs?

NO (rectify situation) ☐

YES (commence ticking in Compliance Level 1) ☐

For example:

• Training programs on offer are circulated.

• Staff are able to access training programs.

• *DOEM* policies and procedures are accessible.

Accident Reporting and Investigation

Statement

The department's occupational health and safety policy defines *accident* and *incident* as:
- **accident** — an unplanned and unexpected event with undesirable or unfortunate consequences that results in injury or property damage;
- **incident** — an undesirable event or occurrence that disrupts the working routine but causes no further loss or injury.

Queensland workplace health and safety legislation uses the general term 'workplace incident' to describe events that may or may not have resulted in workplace injury or illness. The term also applies to serious bodily injuries, illnesses caused by work, and dangerous events.

Accidents and incidents cause, or have the potential to cause, personal injury and damage to property, and are a direct indication that something has gone wrong. It is therefore important that they are thoroughly investigated and the process well documented.

An investigation should reveal the specific cause(s) of the accident or incident, and determine how recurrence can be prevented. Prompt and effective management of accidents and incidents may also reduce the costs of the process.

Effective accident and incident reporting and investigation processes ensure the availability of reliable data that can be used in the development and evaluation of health and safety strategies.

Background information

What is a 'serious bodily injury'?

This is an injury that causes death or impairs a person to such an extent that he or she becomes an overnight or longer-stay patient in a hospital.

What is an 'illness caused by work'?

This is an illness contracted by an employer, self-employed person or worker in the course of work — this includes the recurrence, aggravation, acceleration, exacerbation or deterioration of any existing illness.

What is a 'dangerous event'?

This is an event at a workplace involving imminent risk of explosion, fire or serious bodily injury, i.e. a near miss.

What is a 'work injury'?

This is an injury to an employer, self-employed person or worker in the course of work, which requires first aid or medical treatment — this includes a recurrence, aggravation, acceleration, exacerbation or deterioration of any existing injury.

What are the department's requirements for reporting, recording and investigating?

The department's *Accident and Incidents — Reporting and Investigation Policy* details the requirements for reporting accidents/incidents. These are briefly detailed below.

The injured person's immediate supervisor, the officer-in-charge of the work unit, or any officer delegated with the responsibility by the officer-in-charge must:
- complete the Education Queensland accident report form no later than three days after the event (serious student accidents are also recorded on this form);
- forward all employee, visitor, and **serious** student accident report forms to the relevant district office;
- maintain a record (a copy of the accident report form) of all accidents and incidents at the work site;
- notify the Division of Workplace Health and Safety (DWHS) of a serious bodily injury, an illness caused by work, dangerous event or death;
- initiate an investigation and report, as soon as possible after the event, using the Education Queensland accident report form and guidelines (this responsibility may be shared with the workplace health and safety officer (WHSO));
- record minor student injuries in the workplace's accident register or sick bay records. This should include: name of the injured student; date of the injury; type of injury; where it occurred; how it occurred; and details of first aid and medical attention provided.

What are the DWHS' requirements for reporting, recording and investigating?

Part 7 of the Workplace Health and Safety Regulation 1997 details legislative requirements for accidents/incidents.

In brief, the DWHS must be notified with the approved 'incident record/report' form within twenty-four hours

of the occurrence of a serious bodily injury, an illness caused by work or a dangerous event. A death must be notified **immediately**.

Workplace records must be kept of all workplace incidents, including illnesses caused by work, work injuries and dangerous events.

And lastly, in the event of any of the above workplace incidents' occurring, the scene connected to the incident must not be interfered with, without the permission of an inspector or, if an inspector is not available, a police officer. To interfere with an incident scene may destroy valuable evidence, and breaches legislative requirements. Interference is **only** allowed when it is necessary to save life, relieve suffering, prevent injury to a person, or to prevent property damage.

Reporting and recording accidents and incidents is important because:
* trends can be detected and analysed within and across districts, and throughout the State;
* unknown hazards can be identified;
* useful risk management data for the organisation can be gained;
* records can help with compensation claims if they have been kept from the outset, and are accurate and comprehensive, for example, an employee might experience an aggravation of a previous problem, which can be readily substantiated by previous records;
* it is required under the legislation.

Investigating accidents and incidents is important because:

Investigation provides essential information to allow the prevention of similar types of accidents/incidents. For the investigation process to be effective, all aspects involved with the accident/incident need to be examined. It is important that these investigations focus on collecting factual information, without assigning blame to those involved.

The key benefits of investigation include:
* comprehensive assessment of risky situations, equipment, substances, systems, work practices, etc. can be carried out;
* areas of information or communication breakdown can be identified and remedied;
* preventive strategies can be identified and implemented;
* safe work procedures can be developed and documented;
* training needs can be identified;
* an indication that management is committed to providing a work environment that is safe and healthy.

Accidents and incidents that fall into the following categories should be investigated:
* those that are reportable under departmental policies and the DWHS legal requirements;
* those that result in injury/illness that may require long-term workers' compensation;
* those that result in serious injury/illness (e.g. fractures, lacerations requiring stitches);
* serious student accidents (e.g. ambulance in attendance).

Further information

Legislation
Workplace Health and Safety Act 1995, sections 27–33.
Education Queensland policies and guidelines.
Accidents and Incidents — Reporting and Investigation (HS-08).
Guidelines on Incident/Accident Investigation.
Occupational Health and Safety Policy (HS-07).

Standards
AS1885.1-1991 Workplace Injury and Disease Recording Standard, Standards Association of Australia.

Books and brochures
CCH 1991, *Planning Occupational Health and Safety* (3rd edn), Sydney.
Viner, Derek 1991, *Accident Analysis and Risk Control*, VRJ Delphi.

Other resources
Accident Investigation, Safetycare Series Video 1991.
DWHS offices.

Questions to answer

Suggested people to ask:
principals; registrars; representative members of staff

Suggested questions to ask:

If you are involved in a workplace accident or incident, are there procedures in place for you to follow? ☐ YES ☐ NO

Are you aware of, and familiar with, these procedures? ☐ YES ☐ NO

Have you been shown how to fill out the accident/incident/illness reporting forms? ☐ YES ☐ NO

Where are accident/incident/illness reports kept? _____

_____

Are there documented procedures for reporting workplace accidents/incidents/illnesses? ☐ YES ☐ NO

Are you aware of any work accidents or incidents that have been investigated? ☐ YES ☐ NO

Who performs these investigations? _____

_____

Are there documented procedures for the investigation of workplace accidents and incidents? ☐ YES ☐ NO

Where is documentation on workplace accident and incident investigations kept? _____

_____

Self-evaluation checklist

Date completed: __ /__ /__   Completed by:

CONGRATULATIONS! Best methods practised for the use of accident reporting and investigation data.

5 — BEST PRACTICE

Commitment to accident reporting and investigation as an essential component in the development, monitoring and evaluation of health and safety strategies by:

regularly updating accident statistics on a computer database with graphic applications ☐

establishing procedures detailing update and review of accident reporting and investigation processes ☐

incorporating accident statistics in the workplace's risk management strategies ☐

utilising accident statistics as a resource for the development, monitoring and evaluation of a cost-effective workplace rehabilitation program ☐

4 — GOOD PRACTICE

Developing processes for reviewing accident/incident information to improve occupational health and safety systems within the workplace by:

using accident statistics in the workplace's hazard identification process ☐

circulating the outcomes of accident investigations to staff ☐

implementing and monitoring applicable preventive strategies ☐

ensuring safe work procedures are identified and documented ☐

circulating and discussing trends with the workplace health and safety committee ☐

regularly updating accident statistics and periodically summarising trends ☐

incorporating accident recording, reporting and investigation procedures into the induction program ☐

3 — COMPLIANCE

Putting accident/incident recording, reporting and investigation policies and procedures into operation by:

using Education Queensland guidelines on incident/accident investigation ☐

concentrating on the collection of facts during an accident/incident investigation ☐

developing a process to ensure that accident scenes are not unnecessarily disturbed before being inspected ☐

notifying the DWHS within twenty-four hours of a serious bodily injury, illness caused by work or dangerous event ☐

recording all employee/visitor and serious student accidents on the Education Queensland accident report form within three days of occurrence and sending copies of these to the district office ☐

recording minor student accidents, e.g. sick bay register ☐

2 — ACHIEVING COMPLIANCE

Promoting accident reporting and investigation processes by:

allocating reporting and investigation responsibilities to appropriate staff ☐

identifying hazardous workplace conditions and work practices ☐

contacting the district office where necessary ☐

ensuring that preventive strategies are documented on the accident report forms ☐

reviewing accident report forms to ensure completeness and accuracy of information ☐

1 — INITIATING COMPLIANCE

Accidents are recorded, reported and investigated by:

making accident report forms available ☐

establishing a process for recording minor student accidents, e.g. sick bay register ☐

making information relating to accident reports and investigations available ☐

0 — NON-COMPLIANCE — START

Are accident reporting and investigation conducted at the workplace?

NO (rectify situation) ☐

YES (commence ticking in Compliance Level 1) ☐

For example:
• Workplace accidents are investigated, reported and recorded.
• *DOEM* policies and procedures are accessible.