SAFETY GUIDELINES FOR HARVESTING AND INFIELD TRANSPORT OF SUGAR CANE

A safety information and induction training handbook for employers and harvesting crew members.

CANEGROWERS

ERGON. ENERGY

sugar milling
AUSTRALIAN SUGAR MILLING COUNCIL

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ACKNOWLEDGEMENT

The original booklet published in June 2000 had been prepared by CANEGROWERS in consultation with the Australian Sugar Milling Council and the Executive Office of the Queensland Mechanical Caneharvesters' Association.

This revised electronic version, June 2005, has been modified to incorporate relevant sections of the 2002 Electrical Safety Act.

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Input from CANEGROWERS District Units and AWU is acknowledged.

DISCLAIMER

FOREWORD

These Guidelines aim to increase awareness and improve attitudes, particularly with regard to the safety of people on the ground during in-field harvesting and haulout operations and at the shared workplaces of cane railway and road delivery sidings.

Under the provisions of the *Electrical Safety Act and the Workplace Health and Safety Act* employers and employees share the responsibility for health and safety on the job. The emphasis is on consultation, communication and self-regulation.

CANEGROWERS is committed to fostering better management of workplace health and safety practices and the resulting decrease of work-related injury and illness.

Employers are required to provide information, instruction, training and supervision to enable employees to perform their work in a healthy and safe manner. However, employees should not put their own health and safety, or that of others, at risk while performing work. Inexperience is often a major contributing factor to accidents and new workers are the most susceptible to hazards at work.

Rural industry has the highest rate of workplace accidents in Australia. We need to reduce the human suffering and financial costs sustained by the Queensland rural community, and particularly the sugar cane industry, as a result of workplace related injuries and illness.

These Guidelines, together with the video, *Safe Harvest* and *Delivery Point Safety* are the result of a joint CANEGROWERS and Australian Sugar Milling Council initiative, funded by the Sugar Research and Development Corporation and are designed to provide all workers - employers and employees alike - with important information and guidance.

Cooperation and discussion are the keys to health and safety at work and this is particularly important at the delivery siding where there is interaction between workers from the cane farm and from the sugar mill. Good communication between all parties will assist in the identification of workplace hazards, their prevention and the effective resolution of health and safety issues.

Accidents at work cause personal hardship as well as disruption to the farming operation. Accidents can cost time and money and result in production losses.

Whilst these Guidelines do not attempt to provide detailed workplace health and safety procedures, the workplace health and safety principles contained in them apply to all workers involved in harvesting and haulout operations in the industry. Growers, harvesting contractors and employees alike will find the Guidelines and video useful tools for information and training.

Harry Bonanno
CANEGROWERS

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PREAMBLE

The Guidelines are divided into specific parts for ease of reference. All workers involved in harvesting and haulout operations, including the grower, harvesting contractor and crews should read the complete guidelines but be able to refer to specific sections if necessary. Part D is divided into Railway Sidings and Road Sidings and only the relevant section needs to be accessed.

Two videos, *Safe Harvest* and *Delivery Point Safety* have been produced to complement these Guidelines and have been incorporated on one video tape for ease of reference. In addition, the Sugar Industry Code of Practice 2005 and its supplements, Cane Rail Safety and Sugar Mill Safety, should be read in conjunction with the Guidelines. This Code of Practice is obtainable from your local CANEGROWERS office or online at the Department of Industrial Relations web site www.dir.qld.gov.au

PART A

Introduction

A sugar cane farm can at times be a potentially hazardous workplace. This applies particularly during the harvesting season when large machines (cane harvesters and haulouts) are operated close to each other and to people on the ground.

These guidelines are designed to provide workers in the sugar industry with procedures that will eliminate or minimise risk to both operators and to people working or visiting the farm workplace.

Rural Competency Standards exist for servicing and maintenance of cane haulage vehicles and for operating cane harvesters. Compliance with these standards will ensure safe operation of cane harvesting and haulout machinery.

This document provides guidance for safe practices in harvesting sugar cane and does not take precedence over State Acts, Australian Standards or Advisory Standards. From time to time these guidelines may be reviewed and amended. These safe operating practices provide information additional to employers' safety requirements for operational and maintenance procedures. Where a conflict occurs, an individual employer's conditions take precedence over any conditions in these guidelines, providing the individual employer's safety requirements provide equal or better workplace health and safety conditions.

The guidelines do not replace existing practices and procedures, which through established local use, have provided a working environment that is either as safe or better than that proposed in these guidelines.

This document covers important safety aspects relating to your contract of employment.

General

This booklet has been compiled to provide a guide to the operational safety aspects of harvesting and hauling sugar cane. These safe operating practices do not attempt to cover all aspects of the job and employees are required to exercise care and follow employer instructions for safe work practices at all times. Safety is an integral part of the job and must be given due consideration in the workplace. Local safety issues and other job instructions relative to your employer or sugar mill may be added to the appropriate sections.

Cooperation and teamwork between harvesting crew members significantly reduces the risk of any incident developing during harvesting and hauling-out operations. It is important that each member of the harvesting crew clearly understands the action of the other to ensure safe working procedures. The actions of any member of the harvesting crew must not cause or create a risk of injury to any person on or near the cane harvesting workplace.

Modern harvesting equipment has many improved safety features including reversing lights and warning beepers, safety ignition, indicators, flashing lights etc. It is recommended that where possible, items such as reversing beepers, horns and UHF radios be fitted to all harvesting and haul-out machinery to improve the safety of those engaged in operating the equipment, those working on the ground in close proximity to the equipment, and those legitimate visitors to the farm and delivery siding.

Health and Safety and the Law

The Workplace Health and Safety Act applies to every workplace in Queensland except the mining industry. This means both employees and employers have to meet legal requirements to keep you and your fellow workers healthy and safe on the job.

Legal Responsibilities of Employers

Section 28 of the Workplace Health and Safety Act 1995 sets out the obligations of an employer. These include:

- To ensure the workplace health and safety of each worker at work;
- To ensure his or her own workplace health and safety and that of others is not affected by the way he or she conducts his/her business and work activities.

Section 29 of the Act, covers the obligations of self-employed persons to themselves and to ensure the health and safety of other persons is not affected by the way the self-employed person conducts his or her undertakings.

Section 30 of the Act, imposes obligations on persons in control of workplaces. These obligations, similar to those above for employers, are –

- To ensure the risk of injury or illness from a workplace is minimised for persons entering the workplace to work;
- To ensure the risk of injury or illness from any plant (machinery) or substance (chemical) provided by any person for the performance of work by someone other than workers of the person in control is minimised when used in a proper manner;
- To ensure there is appropriate, safe access to and from the workplace for persons other than the workers of the person in control.

This means that as an employer (grower and/or contractor) you have the following responsibilities:-

- You need to ensure that work under your control is carried out in a safe manner and without risk to the health of employees, contractors and visitors to the workplace.
- You need to ensure that safe methods of work have been established and that employees and contractors are aware of these safe methods, trained in them and consistently follow them.
- You need to be alert to new situations and provide safe ways of dealing with them. This means knowing the legal requirements and where to obtain advice if required.
- Above all, you must set a good example.
- You must ensure that employees are not subjected to risk while in the work environment and that they are provided with relevant Health and Safety information.
- You must investigate and perform a risk assessment of incidents or near misses.
- You must complete an Accident/Incident Report on any incident or near miss which must be kept for 12 months (see Appendix 2).
- You need to ensure that you have good communication with the harvesting/haulout crews – they can often supply accurate information about hazards or potential hazards.
- You have an obligation to notify the Division of Workplace Health and Safety within 24 hours in the event of an incident which –
  - Causes the death of any person, or
  - Causes a person to be hospitalised.

    The information should contain:

    - Date, day and time of accident
    - Name of the injured person
    - Gender of the injured person
    - The address where the accident occurred
    - The occupation of the injured person
    - Details of injuries received
    - A full description of accident
    - The anticipated period of incapacity for employment and in the event that a person dies following the accident, the date, time and place of death.

Legal Responsibilities of Employees

Under Section 36 of the Act, workers and any other person entering or using the workplace have the following obligations –

- To comply with the instructions given for workplace health and safety at the workplace by the grower and harvesting contractor and, at the shared workplace, by the miller.
- To use personal protective equipment where provided, eg. hearing protection, safety boots, high visibility clothing, eye protection and head protection when required.
- To report any additional hazards or potential hazards to your employer.
- To report all accidents/incidents to your employer.

- To report all near misses to your employer (a near miss is an incident which has the potential for a serious accident, being only the element of luck separating it from a serious accident).
- Not to wilfully or recklessly interfere with, or misuse anything, provided for workplace health and safety at the workplace.
- Not to wilfully place at risk the workplace health and safety of any person at the workplace.
- Not to wilfully injure himself or herself.

Children unaccompanied by adults should not enter the farm workplace.

Safety Commitment

Whilst there are legal obligations for both employers and employees under the Workplace Health and Safety Act and the Electrical Safety Act it is your own commitment to safety that will determine how safe your workplace is. Having an attitude that "safety at your workplace is paramount" will serve to build morale with the associated benefits of increased productivity and efficiency.

Electrical Safety Act 2002

The Electrical Safety Act is directed at eliminating the human costs to individuals, families and the community of death, injury and destruction that can be caused by electricity. Accordingly, the purpose of the Act is to establish a legislative framework for:

- Preventing people from being killed or injured by electricity; and
- Preventing property from being destroyed or damaged by electricity

The Electrical Safety Act applies exclusion or no go zones around all electrical overhead lines for the safety of everyone. The safe approach distance for any untrained person is 3 m. Encroachment into the Exclusion Zone is strictly forbidden. However if you turn the power off, the exclusion zone no longer applies.

Note: Where the Workplace Health and Safety Act 1995 and the Electrical Safety Act 2002 both apply, the Electrical Safety Act takes precedence.

Obligations: Refer to Code of Practice Sections 1.5 & 1.6

The Electrical Safety Act imposes obligations on persons who may affect the electrical safety of others by their acts or omissions and there are three ways you can meet your electrical safety obligations:

- Regulations
- Ministerial notices
- Codes of Practice

Code of Practice

The Electrical Safety Act 2002 introduces codes of practice for specific areas of electrical safety. The codes outline ways of meeting an electrical obligation in those areas. They give practical advice on how to identify and manage exposure to risk of injury and property damage caused directly or indirectly, by electricity.

The section of the Code of Practice for Working Near Exposed Live Parts, that applies in this instance to the Sugar Industry is:

- Section 8; Agricultural work near overhead electric lines.

Section 8 caters for agricultural workers operating near exposed live parts such as overhead lines. Examples of work under or near overhead lines includes:

- Handling irrigation pipes
- High clearance spray tractors
- Using lifting equipment such as fertiliser one tonne bag lifter, tipper trucks
- High lift or elevating equipment such as cane harvesters, travelling irrigators and elevating cane transporters

Risk Management

Risk management is a structured system for identifying hazards, assessing risks associated with those hazards, putting in place measures to control the unacceptable risks and to review the control measures to ensure they are effective and have not introduced any new hazards.

Safe System of Work

Applying the risk management process and implementing a documented safe system of work would assist in demonstrating how you discharged your obligations under the Electrical Safety Act.

Documentation:

A properly documented risk assessment should be part of a safe system of work. The risk assessment would need to identify the hazards associated with the work, the risks involved and the control measures put in place to eliminate the hazards or control the risks associated with those hazards.

This process would need to demonstrate the principles of risk management, perform a safety check using the following essential components:

- Identify the hazard- determine potential effects of the hazard;
- Risk assessment;
- Decide on appropriate control measures;
- Implement and document the control measures
- Monitor and review

Managing or controlling the hazard may take the form of elimination, re-engineering, changing work procedures, introducing administrative controls or providing Personal Protective Equipment to minimise risk to the employee

Safe System Content:

In addition to risk assessment the following could also form part of a safe system of work;

- Job safety analysis
- Worker briefings
- High risk paddocks to be worked during daylight hours
- Information obtained about the heights of electrical lines and machines
- Use of signs, overhead line and stay wire markers

Note: A safe system of work on one area of a farm may not adequately address the risks for another area of a farm.

Record Keeping:

It is important to document your health and safety activities and keep the following records for the sake of:

- Meeting legal requirements
- Providing information to workers, and
- Monitoring the health and safety performance of your business

Hazard identification, risk assessment and control process- These records include checklists, risk assessment information and risk control plans. They provide evidence of your health and safety activities and help you review and improve the health and safety performance of your business.

Maintenance of plant and equipment- these records enable you to schedule regular inspections and provide evidence of maintenance carried out. Keep these records with manufacturers specifications and operators manuals. Maintenance records also improve the resale value of equipment by providing a complete history.

Accidents and incidents- these records enable you to identify hazards, monitor trends and take the appropriate action to prevent recurrence. Near misses or dangerous occurrences should also be recorded, since these are often a warning signal of a future, preventable accident. The Workplace Health and Safety Act and Workers Compensation Act require employers to maintain records of accidents and injuries.

Hazardous Substances Register- this is a list of all chemicals used at the workplace including a collection Material Safety Data Sheets MSDS, which can be obtained free from the chemical supplier / manufacturer. Record this information on the supplied *Hazardous Substances Register*. The register should be kept as an assessable source of information for workers using chemicals. If you store or handle dangerous goods you may also need to keep records relating to these activities.

Training Records- it is essential that you have a record of the training that has been provided to every employee, which should include details of the training content, who conducted it and when it was provided.

Personnel Records- these include a workers relevant experience, qualifications, personal details and emergency contacts.

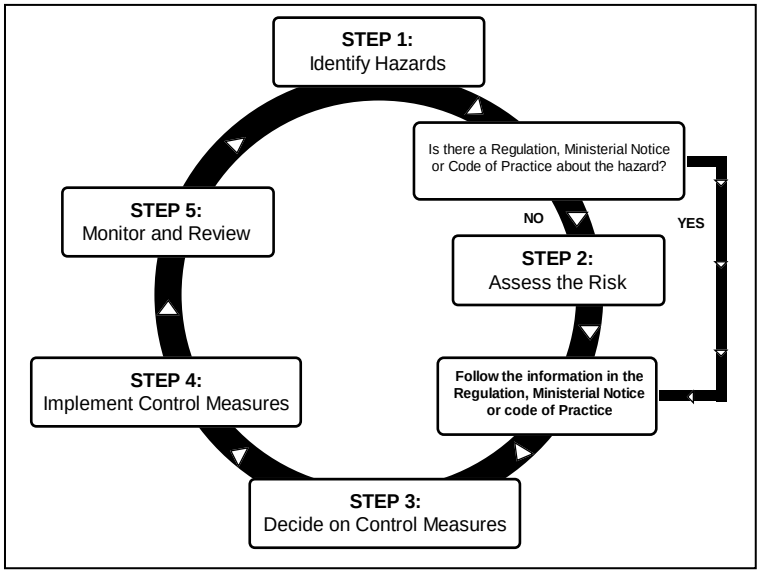
Risk Management Process

Hazards and Risks

Hazards and risks are not the same thing.

- A *Hazard* is something that has the potential to cause harm (eg. A bare HV overhead power line crossing the field where a cane harvester is cutting).
- A *Risk* is the likelihood that death, injury or illness might result from exposure to the hazard (eg. The raised harvester elevator arm contacting the live overhead power line while traversing the field, with the harvester operator sustaining electric shock while exiting the harvester)

The Five Step Risk Management Process



1. Inspect the work site and Identify any hazards in a particular work situation. It should be noted that some hazards are not always obvious and may be hidden, transient or developing.

2. If there is a Regulation or Ministerial Notice about the Hazards, these requirements Must be complied with and Implemented.

Assess the risks of injury or property damage that may result from the hazards.
This step will help to determine the level of risk associated with identified hazards and establish a priority list based on risk levels.
The desired outcome is a priority list for control measures.

3. Decide on control measures to eliminate the hazard or minimize the risk of injury or property damage. If there is a Code of Practice, you should do what the Code says or use another method of managing risk exposure.

The hierarchy of control is:

- **I.** Eliminate the hazard
- **II.** Substitute with a less hazardous material, process or equipment
- **III.** Design/redesign equipment or work process to reduce exposure to hazards
- **IV.** Introduce administrative controls
- **V.** Use appropriate Personal Protective Equipment

In deciding which control measures to adopt, start at the top of the hierarchy and work your way down. Some situations may require a number of control measures to be applied together to manage the risks to an acceptable level.

4. Implement the documented control measures

5. Monitor and review the effectiveness of the control measures. It may be necessary to modify the control measures or the way they are implemented if the measures are not effective or if new problems arise as a result of the original control measures.

References:

- Electrical Safety Act 2002
- Code of Practice – Working Near Exposed Live Parts

The Electrical Safety Office Website for access to Electrical Safety legislation and Codes of Practice

http://www.eso.qld.gov.au/legislation/index.htm

- Workplace Health and Safety Act 1995
- Sugar industry Code of Practice 2005 with Sugar Mill and Cane Rail Safety Supplements

The Department of Industrial Relations web site: www.dir.qld.gov.au

Accredited Safety Training

Training Sessions for electrical "Authorised Persons" is available, for anyone who works in close proximity to live parts, by contacting your nearest Canegrowers Office. Canegrowers training personnel can provide individual or group training sessions ensuring your training compliance to The Electrical Safety Act.

Farm Preparation for Harvesting

Maintenance of headlands and haul roads

It is the responsibility of growers to maintain headlands and haul roads in good order. This contributes to improved safety and productivity.

Rounded headlands will contribute to safer turning operations and will also improve visibility at level crossings for both harvesting and haulout crews and the general public.

Adequate clearance needs to be provided to safely turn harvesting equipment adjacent to cane railways, QRail and roadways. Poor visibility is a hazard which places harvesting crews and mill locomotive crews at risk. A minimum distance of 2.5 metres from the nearest rail must be maintained by harvesting and haulout units whilst turning or manoeuvring adjacent to cane railways.

Headland width should be outside the mill easement of 2.5 metres from the nearest rail to ensure adequate room for harvesting and haulout units whilst turning or manoeuvring adjacent to cane railways.

Farm map

It is recommended that the grower obtain from the mill a copy of his/her farm plan. This will enable the grower to undertake a risk assessment of the farm and to take steps to control any such identified risks. The grower should amend the farm plan/map to show existing or potential risks such as drains, irrigation equipment, tramlines, power lines, narrow headlands, roadways, houses, refuelling, servicing, rural bus stops and areas for arrival of potential visitors. Specific operational procedures may need to be followed – for example, negotiating angled headlands where there is less visibility and greater difficulty in manoeuvring. Discussions should be held between crew members to ensure that equipment can be manoeuvred safely in such situations.

- Should a farm map not be available, then an equal or better map is to be provided.
- Maps indicating routes and potential hazards will provide the benefit of efficient and therefore more profitable, haulage of cane.

Night harvesting

Where night harvesting is carried out, hazards must be identified, preferably by the use of reflectors. Witches hats marked with reflectors provide easily transportable hazard identifiers.

Controlled Burning

Controlled burning of standing cane in preparation for harvest must take place within the prescribed times of the Local Award or permit. Compliance with Award or permit conditions is essential. Prior to burning, consideration should be given to prevailing conditions, eg. wind direction and velocity so that smoke does not create a hazard, particularly for road users. Appropriately positioned signage must be used if smoke is likely to reduce visibility on roads. The grower/manager/contractor has a duty of care to ensure that the burning operation is conducted -

- according to industry practice;
- with a proper briefing and delegation of duties for those persons in attendance prior to burn;
- using protective clothing;
- using radio communication where necessary;
- with an available adequate water capacity to manage the fire; and
- with machinery such as a finger wheel rake to prevent the spread of fire.

PART B – PRE-OPERATIONAL

Briefing

At a mutually convenient time, usually the afternoon before or immediately prior to start-up, the harvesting and haulout crews should be familiarised with routes, hazards and expected visitors. One method of providing this information is by means of a farm map.

Fatigue management should be addressed and the briefing should also include what to do in the case of spillage, breakdown or accident.

Make sure that harvesting and haulout crews are aware that it takes a fully laden train travelling at 32 kms per hour 1 kilometre or more to stop! It takes a loaded haulout travelling at 32 kms per hour, 13.75 metres to come to a halt. Wet or slippery conditions increase braking distances.

Routes

Harvesting and haulout crews are to be provided with routes for the harvesting operation to be carried out on the farm. The route to be taken from the harvesting operation to the delivery siding must be identified. Use different routes if possible for entering and exiting the siding. The briefing should include any hazards identified on the Farm map.

Hazards

A risk assessment should be carried out to enable all existing and potential hazards to be identified on the farm map. Hazards may include:

- drains
- irrigation equipment
- tramlines
- power lines (heights, voltage and insulation), power poles and stay wires
- narrow headlands
- roadways
- houses
- refuelling
- servicing
- potential visitors
- rural bus stops; and/or
- any other hazards which may be specific to the individual farm/circumstances.

Crew members should discuss any of the above-mentioned hazards to ensure that equipment can be manoeuvred safely in such situations. Specific operational procedures may need to be followed – for example, negotiating angled headlands where there is less visibility and greater difficulty in manoeuvring.

Any changed conditions which result in hazards specific to the day must be identified, eg. weather, wet conditions, expected farm visitors, etc should be communicated to harvesting/haulout crews in order that they can be discussed and the hazards managed appropriately.

Stress

Work-related stress is a workplace health and safety issue and can contribute to accident potential. Stress is an integral part of the work situation for harvesting and haul-out operators because of their proximity to each other and the often difficult manoeuvring involved. Additional stress factors may be:

- Inadequate briefing on route and hazard identification which may result in accidents or near misses – this may be seen as exposing an employee to a foreseeable risk of injury;
- Uncertainty of the whereabouts of people on the ground, especially those working in close proximity to the operations;
- A failure to establish, maintain and enforce a safe system of work;
- Inadequate supervision;
- Failure by the employee to comply with instructions and therefore disrupt team operations.

Heat Stress

Heat stress occurs when heat is absorbed from the environment faster than the body can get rid of it. The resulting strain on the body comes from the combined contributions of the job (e.g. work activity), environmental factors (e.g. air temperature, humidity, air movement, radiant heat), and worker factors (e.g. extent of acclimatisation and hydration).

In Queensland, especially between October and April, sudden hot spells are responsible for most cases of heat illness and discomfort. Many interstate workers returning for seasonal work have lost the benefits of acclimatisation and humidity levels, which can be high as well. When humidity is high, sweat will not evaporate as quickly, so our ability to lose heat is reduced.

When conditions become increasingly hot the most common health problems to occur are fainting, transient heat fatigue and heat rash. However, with excessive exposure to heat, especially those who are overweight, elderly or those on specific medications, more serious heat illnesses such as heat cramps, heat exhaustion and heat stroke may occur.

Hydration

Most heat illnesses are caused by dehydration. You can sweat about a litre an hour during heavy work and most workers exposed to hot conditions drink less fluid than needed because our thirst response is insufficient and lags behind the actual level of dehydration. Therefore, instead of depending on thirst, the worker should drink 150 – 200 millilitres of cool fluids every 15 – 20 minutes (rather than downing a litre at less frequent intervals). Full re-hydration should be achieved before recommencing work on subsequent days.

PART C - HARVESTING OPERATIONS

Arrival at work

- All persons reporting for work must be in a state fit for work, having had adequate rest and be free of alcohol and drugs. The Queensland Traffic Act states that all drivers of vehicles, other than private motor cars or motor cycles, are required to maintain a zero blood alcohol content at all times. Loss of licence may result in loss of employment.
- Induction procedures for all operators of harvesting/haulout machinery must have taken place so that operators are familiar with machine operations and aware of their Workplace Health and Safety obligations.
- Operators must have read and be familiar with the relevant Operator's Manual. They must observe all safety and hazard signs in various locations on machines and ensure that all safety devices are operational.
- Operators must have a field operations routine in place during harvesting.
- Operators must record starting and finishing times in employer's time sheets.
- Appropriate clothing and footwear suitable for the task/s should be worn, eg. hats and non-slip soles. Loose clothing should be avoided.

Pre-Operational and Maintenance Procedures

Unless instructions have been given which provide superior workplace health and safety outcomes, always follow manufacturer's instructions in starting-up and servicing vehicles. General safety procedures are as follows:

- Park machine on firm flat ground for servicing;
- Always apply the parking brake before leaving the control cabin;
- Switch engine off and remove key from ignition;
- It is strongly recommended that a **Personal Danger Tag**" (PDT) be filled out and attached to the steering wheel or appropriate location as may be designated;
- Use steps provided to avoid falls when alighting from the machine;
- Keep the platform and all steps free from oil and grease to lessen the possibility of slipping. Dew on metal surfaces is particularly hazardous;
- Take care whilst cleaning windows and cleaning down trash;
- Ensure that an operational fire extinguisher is easily accessible at all times;
- Do not carry out maintenance with the engine running;
- If necessary to make checks with the engine running, always use two persons – one at the controls and the other performing the check;
- Do not carry out maintenance under raised sections unless safety stays have been locked in position;
- Ensure safety stays are disconnected before lowering the equipment.

Note: A **Personal Danger Tag** (PDT) is to protect the person – it lets others know that "someone is there" and so provides a warning, or a form of personal protection. This is also to safeguard machinery which is under repair or service, etc. No person, other than the person who positioned the PDT is to remove the tag. After removal, the PDT should be destroyed. Only after the PDT is removed can the item of machinery or equipment be returned to service. Below are both sides of a sample PDT which can be purchased in boxes of 100.

Start-up

Before starting a harvester, ensure that –

- The area around the vehicle is clear of obstructions;
- All is clear behind;
- Any persons on the ground are warned to stay clear.

Field conditions

Safe controlled operation of cane harvesting and haulout operations can be affected by a range of conditions including:

- sloping terrain; care should be taken to avoid rollover
- restricted visibility when in close proximity to both cane and Q-Rail railway lines;
- poor visibility - dust, fog, mist and narrow headland conditions;
- wet farm conditions. In particular wet slippery conditions increase braking distances;
- boggy conditions increase hazards with additional vehicles and personnel in the field carrying out towing or pushing;
- night time operations;
- varying infield conditions;
- towing – take extra care when towing and use appropriate equipment, ie. chains, wire ropes;
- on-farm road and headland conditions; **(take care with restricted visibility!)**
- public road conditions;
- potentially hazardous obstacles such as irrigation hydrants, culverts, banks, cane railway lines, power poles and lines should be identified and appropriate action taken

Teamwork

Teamwork is essential for in-field operations. Continuous communication should take place between the harvester driver and haulout crew who are operating and manoeuvring their vehicles in close proximity. An accident can occur very easily in such circumstances. Effective communication between crews facilitates safe work.

Communication between most harvesting crews is done by means of a UHF/VHF radio. Avoid inconsequential chatter and keep communication brief and to the point. If radio devices are not available, consideration should be given to implementing a standardised system of signals which can be used between operators and/or between operators and people on the ground. Signals will also assist in safe towing operations. A standard set of recommended signals is shown on Appendix 1.

Visitors

All visitors to the workplace should report to the grower/manager. No person, even if authorised, should approach working harvesting operations within a distance of 20 metres. Visitors must be made aware of the following -

- Persons on foot or in cars should park or position themselves clear of the operational harvesting area and wait until signalled by the harvesting crew to approach.
- A member of the harvesting/haulout team will stop when appropriate and attend to the person on the ground.
- Visitors should not approach the harvesting operation unless the person has received a clear unambiguous signal allowing the approach.
- Operators need to be aware of all persons in the vicinity at all times.
- Persons on the ground should remain at least 20 metres clear of a reversing machine.

Authorised workers on the ground

At times there is a need for a person to work in close proximity to harvesting eg. a grower walking in front of a harvester to remove stones. Such a person should wear high visibility clothing, eg. orange vest, and must at all times be in the line of vision of the harvesting operator.

People such as researchers undertaking trial work in close proximity to harvesting operations should also wear such clothing.

Workers on the ground at night create additional risks and should wear reflective clothing.

Before entering the harvesting area, such an authorised worker should contact the harvesting crew – all crew members must be aware of any persons on the ground.

Turning harvesters close to cane railways and roadways

In areas of poor visibility, rounded headlands will contribute to safer turning operations.

Adequate clearance needs to be provided to safely turn harvesting equipment adjacent to cane railways, QRail and roadways. Poor visibility is a hazard which places harvesting crews and mill locomotive crews at risk. A minimum distance of 2.5 metres from the nearest rail must be maintained by harvesting and haul-out units whilst turning or manoeuvring adjacent to cane railways.

Headland width should be outside the mill easement of 2.5 metres from the nearest rail to ensure adequate room for harvesting and haulout units whilst turning or manoeuvring adjacent to cane railways.

Harvester crews should advise the traffic office when harvesting adjacent to the cane railway main line. Information must include specific location, expected starting time and probable duration of harvesting. If possible, harvesting warning signs ('H' Boards) should be used - see "Communication" on page 17.

Operations

- Turning is a time of high risk for harvesters – refer to 'Turning' above.
- Care should be taken to reduce the risk of collision with other vehicles in-field, on-farm roads and headlands and on public roads. Risk of collision on corners is often greatest early in the season with fully-grown fields restricting visibility (consider rounded corners).
- Use a speed appropriate to headland conditions. Exercise great care when travelling next to or across ditches and along banks.
- Keep harvester away from the shear line on banks.
- When harvesting occurs out of daylight hours, check to ensure that hazards such as irrigation hydrants, power poles, shear lines have been identified, preferably by the use of reflectors.
- Be aware of overhead power lines, poles and stay wires.
- Determine if a Safety Observer and an Authorised Person (Electrical Safety Act) is required using the risk management process for operating equipment or machinery near powerlines.

Operations near electrical assets

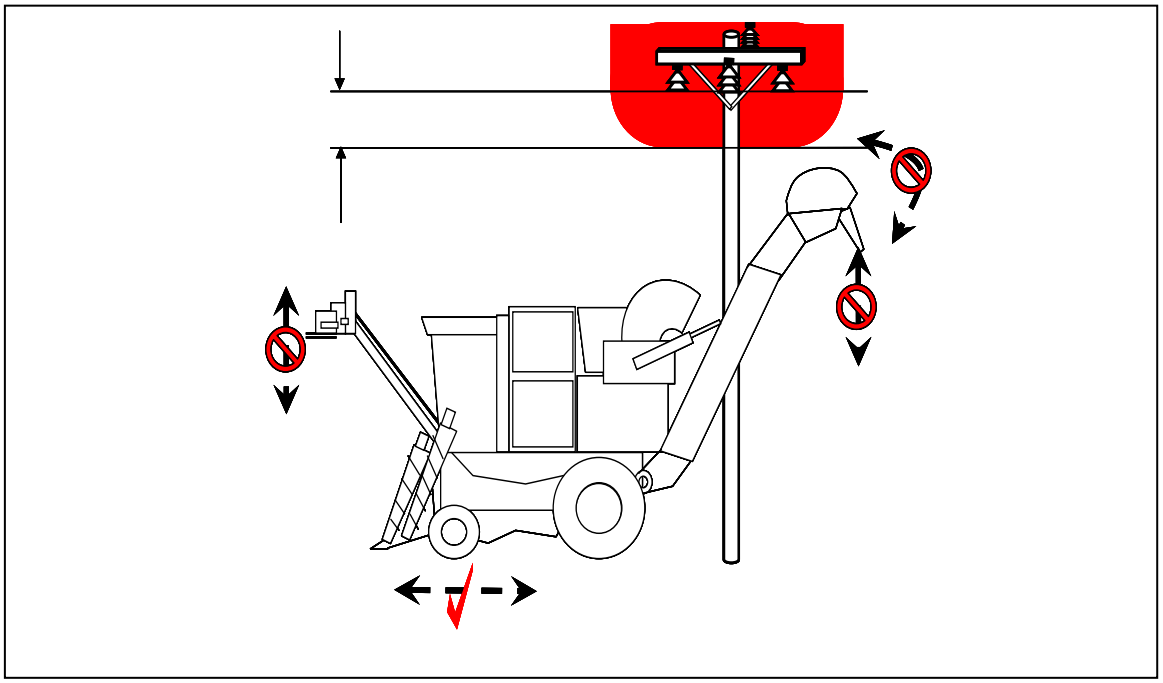
To comply with the requirements of the Electrical Safety Act, landowners/growers should have completed a risk assessment for any operations near exposed live overhead parts.

A grower is required to submit a Safety Advice Request Form to the electrical entity for that area. A trained officer would then perform an assessment of the nominated danger zones. This will determine the height, voltage and insulation rating of the electrical asset and some control measures that can be used to eliminate or minimise any risk to the prescribed electrical asset. This assessment will determine whether or not a safety observer and/or an Authorised Person are required to operate a cane harvester or haulout in the immediate area.

A copy of the risk assessment and a map detailing all the identified hazards for that particular farm should be supplied to the relevant contractors. The contractor should determine before the start of harvesting near power lines whether the harvester is operating as a vehicle or operating plant to determine the correct size of Exclusion zone that applies.

Where a hazard involving an electric line has been identified the contractor would have to decide whether a generic risk assessment or one for each farm was needed. This should take into consideration the particular circumstances for each farm.

EXCLUSION ZONE



If the harvester height remains constant and cannot affect the distance between the harvester and the electric line, it is classed as a 'VEHICLE' and a safety observer is not obligatory and the exclusion zone for a 'VEHICLE' will apply. However if the profile of the vehicle changes during operation in such a way to affect the exclusion zone distance, the vehicle becomes 'OPERATING PLANT', eg if the discharge elevator of the harvester is moved up or down or alters it's discharge direction.

Different exclusion zones apply for 'vehicles' and 'operating plant'.

For further information on Regulations and training refer to **REFERENCES page 8**

Loading infield

- Maintain a continuous watch over the harvester's position in relation to the haulout to avoid collision between machines or contact between the harvester's elevator and the haulout.
- Overfilling of haulouts leads to loss of cane and spillage both on roads and at sidings.
- Good radio communication between harvester driver and haulout operators is essential for safe co-ordinated turning at the end of a block or when the haulout is required to reverse fill.

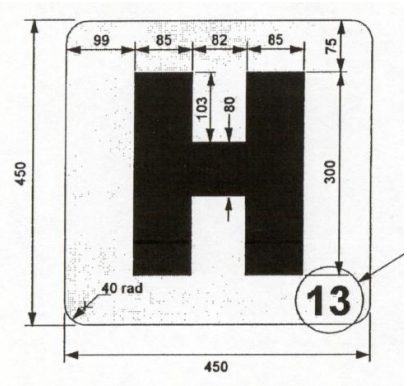
Communication

- Radio communications are an important safety aid. In communicating with the haulouts or locomotive, the following procedures should be followed. This will also result in improved productivity and efficiency as coordination of haulout deliveries and locomotive pick up will be enhanced.

  - All communication should be concerned with specific issues.
  - Should be brief and to the point and acknowledged.
  - Unnecessary chatter, abuse and inappropriate language are not tolerated.
  - Example of process when calling mill –
    - Identify group no. eg “Group 86 to Traffic Office” (repeat twice)
    - Wait for response
    - Deliver Message
    - Wait for response
    - Acknowledge message received eg. “Group 86 to Traffic Office/Mill Base, Message received.”

- It is recommended that the harvesting contractor erect an ‘H’ board (including call sign) 500 metres from risk area. If this practice is not customary and a need is identified, consultation with the mill to introduce the practice is suggested. These harvesting warning signs must only be placed beside the track when harvesting is actually in progress and must be removed once the danger or hazard ceases to exist. Below are two recommended designs.

For both signs:
Matt black lettering centered on yellow reflectorised background



Harvester group’s radio frequency channel

Towing procedures in boggy conditions

Towing and pushing units in boggy conditions creates additional hazards. To reduce the potential for accidents, ensure tensile strength and maintenance of chains ropes and towing points are adequate.

Often there are additional personnel on the ground in these circumstances. A clear communication system is necessary to ensure effective and safe interaction with all persons present.

What to do in the case of spillage, accident or breakdown

Accidents

Report all accidents or near misses to your employer immediately. If an accident occurs on mill land (railway siding, crossing or track), the Traffic Officer or appropriate Mill contact must also be advised.

Breakdown

Advise your employer immediately so that maintenance can be carried out and disruption to harvesting minimised. If the breakdown causes delays in filling bins, advise Traffic Officer or appropriate Mill contact.

Spillage

Spillage is primarily a problem at the delivery siding. Do not overload haulouts as spillage is a danger to personal safety of both haulout drivers and locomotive drivers and constitutes a financial loss to all parties in the industry.

Over-filling of haulouts may result in spills on public roads which are hazardous to traffic. Should this occur, the haulout crew must clear the spillage from the road immediately.

Workshop and Field Maintenance Safety

General

The following points provide minimum requirements for servicing and maintaining machinery. Please refer to the relevant Operator's Manual for specific servicing and maintenance procedures.

- Park machine on firm flat ground for servicing.
- Always apply the parking brake before leaving the control cabin.
- Switch off the engine before working on the machine. Remove the key from the ignition. Keep the key in your pocket.
- It is strongly recommended that a Personal Danger Tag" (PDT) be filled out and attached to the steering wheel or appropriate location as may be designated.
- Read and follow recommendations in manufacturers' operator's manual.
- When working under a harvester ensure all relevant hydraulic cylinders are blocked to prevent collapse. The movement of the base cutter height lever from the neutral position will drop the front of the machine. A faulty hydraulic hose will cause the front of the machine to drop very suddenly. If the harvester is not fitted with safety stays, place a block of timber under the centre of the basecutter discs or under the front of the machine before working on the machine.
- **Danger – Beware of rotating parts**
- Great care should be taken replacing all cutting blades - topper, basecutter and chopper blades. Follow manufacturers' recommendations.

- Exercise caution when cutting and grinding. Hazards include noise, eye injury and potential serious injury from fracturing cutting or grinding discs. Hearing and eye protection must be used.
- Beware of trash fires when cutting or grinding in the field.
- Ensure machine guards are fitted. Electric power tools must be used with some form of current protection device.
- Ensure grinding and cutting discs match the speed rating of the tool.
- Wear suitable clothing when operating or working on a machine. Loose clothing and/or unsecured long hair are hazards.
- Use steps provided to avoid falls when alighting from machine.
- Keep the platform and all steps free from oil and grease to lessen the possibility of slipping. Dew on metal surfaces is particularly hazardous.
- Take care whilst cleaning windows and cleaning down trash.
- Ensure that an operational fire extinguisher is easily accessible at all times.
- Do not carry out any maintenance with the engine running.
- Alert other personnel by blowing the horn before starting the engine of the harvester.
- **Do not service machines whilst the engine is running.** If necessary to make checks with the engine running, always use two persons. One must stay at controls while the other performs the check.
- When working with others, choose a group leader and work according to his instructions. Do not perform any maintenance beyond the agreed work.
- Do not jack up a machine unless the jack and the machine are on very firm ground. Make sure there is a firm foundation under the jack. Use stands where practical.
- Fuel, anti-freeze and oil are dangerous substances. Never handle fuel, grease, oil or wear oily clothes in places where there is any fire or flame.
- To minimise fire risk due to static electricity discharge during refuelling, ensure that the hose nozzle is kept in physical contact with the fuel tank filler.
- **Do not smoke while refuelling.**
- Battery Electrolyte WARNING - If the electrolyte gets on your skin or clothes, immediately wash with plenty of clean water.
- **Caution -** to avoid gas explosions, do not bring fire or sparks near the battery.
- Exhaust gas is dangerous. When running the engine for prolonged periods in poorly ventilated areas, there is a danger of gas poisoning, so open the windows or doors to ensure a good supply of fresh air.

This completes the harvesting section of the Guidelines; however you are encouraged to read the complete Guidelines as this will assist you to understand the whole operation and the roles of other team members.

PART D - HAULOUT OPERATIONS

Arrival at work

- All persons reporting for work must be in a state fit for work, having had adequate rest and free of alcohol and drugs. The Queensland Traffic Act states that all drivers of vehicles, other than private motor cars or motor cycles, are required to maintain a zero blood alcohol content at all times. Loss of licence may result in loss of employment.
- Induction procedures for all operators of harvesting/haulout machinery must have taken place so that operators are familiar with machine operations and aware of their Workplace Health and Safety obligations.
- Operators must have read and be familiar with the relevant Operator's Manual. They must observe all safety and hazard signs in various locations on machines and ensure that all safety devices are operational.
- Harvester and haulout operators must be aware of field routines.
- Operators must record starting and finishing times in employer's time sheets.
- Appropriate clothing and footwear suitable for the task/s should be worn, eg. hats and non-slip soles. Loose clothing and unsecured long hair is a hazard.

Pre-Operational and Maintenance Procedures

Unless instructions have been given which provide superior workplace health and safety, always follow manufacturer's instructions in starting-up and servicing vehicles. General safety procedures are as follows:

- Park machine on firm flat ground for servicing.
- Always apply the parking brake before leaving the control cabin.
- Switch engine off and remove key from ignition.
- It is strongly recommended that a **Personal Danger Tag** (PDT) be filled out and attached to the steering wheel or appropriate location as may be designated;
- Use steps provided to avoid falls when alighting from the machine.
- Keep the platform and all steps free from oil and grease to lessen the possibility of slipping. Dew on metal surfaces is particularly hazardous.
- Take care whilst cleaning windows and cleaning down trash.
- Ensure that an operational fire extinguisher is easily accessible at all times.
- Do not carry out maintenance with the engine running.
- If necessary to make checks with the engine running, always use two persons – one at the controls and the other performing the check.
- Do not carry out maintenance under raised sections unless safety stays have been locked in position.
- Ensure safety stays are disconnected before lowering the equipment.

Note: A **Personal Danger Tag** (PDT) is to protect the person – it lets others know that "someone is there" and so provides a warning, or a form of personal protection. This is also to safeguard machinery which is under repair or service, etc. No person, other than the person who positioned the PDT is to remove the tag. After removal, the PDT should be destroyed. Only after the PDT is removed can the item of machinery or

equipment be returned to service. Below are both sides of a sample PDT which can be purchased in boxes of 100.

Start-up

Before entering the cane haulage vehicle, ensure that –

- The area around the vehicle is clear of obstructions.
- All is clear behind.
- Any persons on the ground are warned to stay clear.
- The horn is always sounded before driving off.
- Purchase and fit a reversing beeper if the unit is not supplied with one.

Field conditions

- Potentially hazardous obstacles such as irrigation hydrants, culverts, banks, cane railway lines, power poles and lines should be identified and marked on farm maps and appropriate action taken.
- Haulouts - beware of overhead powerlines, stays and poles, particularly at the delivery siding!
- Haulout operators hauling out full bins should take a different route to the operator hauling empty bins to and from the siding.
- When operating machinery on slopes particular care should be taken to avoid rollover.
- When turning on an incline, always turn so that the hitch (articulation point) is uphill with the front of the tractor downhill. Stability is reduced by overloading on inclines.
- Safe controlled operation of haulout operations can be affected by a range of conditions including:
  - sloping terrain;
  - poor visibility - dust, fog, mist and narrow headland conditions;
  - wet farm conditions. In particular wet slippery conditions increase braking distances;
  - boggy conditions increase hazards with additional vehicles and personnel in the field carrying out towing or pushing;
  - night time operations;
  - varying infield conditions;
  - towing – take extra care when towing and use appropriate equipment, ie. chains, wire ropes;

- on farm road and headland conditions **(take care with restricted visibility)**; and
- public road conditions.

Teamwork

Teamwork is essential for in-field operations. Continuous communication should take place between the harvester driver and haulout crew who are operating and manoeuvring their vehicles in close proximity. An accident can occur very easily in such circumstances. Effective communication between crews facilitates safe work.

Communication between most harvesting crews is done by means of a UHF/VHF radio. Avoid inconsequential chatter and keep communication brief and to the point. If radio devices are not available, consideration should be given to implementing a standardised system of signals which can be used between operators and/or between operators and people on the ground. Signals will also assist in safe towing operations. A standard set of recommended signals is shown on Appendix 1.

Operations

In areas of poor visibility, rounded headlands will contribute to safer turning operations.

- Care should be taken to reduce the risk of collision with other vehicles in-field, on farm roads and headlands and on public roads. Risk of collision on corners is often greatest early in the season with fully-grown fields restricting visibility (consider rounded corners).
- Separation techniques (in one way and out the other) and radio communication are useful control methods.
- Use a speed appropriate to the haul road and headland conditions. Reduce speed as the terrain gets rougher.
- Exercise great care when travelling next to or across ditches and along banks - keep equipment away from the shear line on banks.
- Haulouts must observe all road rules and follow advisory signs.
- When harvesting occurs out of daylight hours, check to ensure that hazards such as irrigation hydrants, power poles, shear lines have been identified, preferably by the use of reflectors.
- Intersections and crossings provide additional hazards – abide by road rules.
- Cross site-lines at right angles.

Turning haulouts close to cane railways and roadways

In areas of poor visibility, rounded headlands will contribute to safer turning operations.

Adequate clearance needs to be provided to safely turn harvesting equipment adjacent to cane railways, Q-Rail and roadways. Poor visibility is a hazard which places harvesting crews and mill locomotive crews at risk. A minimum distance of 2.5 metres from the nearest rail must be maintained by harvesting and haul-out units whilst turning or manoeuvring adjacent to cane railways.

Headland width should be outside the mill easement of 2.5 metres from the nearest rail to ensure adequate room for harvesting and haulout units whilst turning or manoeuvring adjacent to cane railways.

In some areas, an Ev-Alert warning system has been fitted to units and is a useful safety aid. Such a system is worth serious consideration.

Reversing in the field

Reversing a haulout unit is one of the most potentially hazardous operations in the workplace. Rear visibility is very limited and stringent procedures must be followed to ensure no accidents to person or property occur.

During harvesting operations, haulouts can reverse unexpectedly. Maintain safe clearance behind haulouts and harvesters, particularly at the end of the rows.

Visitors

All visitors to the workplace should report to the grower/manager. No person, even if authorised, should approach working harvesting operations within a distance of 20 metres. Visitors must be made aware of the following -

- Persons on foot or in cars should park or position themselves clear of the operational harvesting area and wait until signalled by the harvesting crew to approach.
- A member of the harvesting/haulout team will stop when appropriate and attend to the person on the ground.
- Visitors should not approach the harvesting operation unless the person has received a clear unambiguous signal allowing the approach.
- Operators need to be aware of all persons in the vicinity at all times.
- Persons on the ground should remain at least 20 metres clear of a reversing machine.

Authorised workers on the ground

High visibility clothing should be considered when a person needs to work in close proximity to the harvesting/haulout operation. This could be a grower who walks in front of a harvester to remove stones.

This clothing should also be worn by people such as researchers undertaking trial work in close proximity to harvesting/haulout operations. Workers on the ground at night create additional risks and should wear reflective clothing.

Before entering harvesting area, authorised person should contact harvesting crew and be in full view of the harvester operator at all times.

Towing procedures in boggy conditions

Towing and pushing units in boggy conditions creates additional hazards. To reduce the potential for accidents, ensure tensile strength and maintenance of chains, ropes and towing points are adequate.

Often there are additional personnel on the ground in these circumstances. A clear communication system is necessary to ensure effective and safe interaction with all persons present.

Loading infield

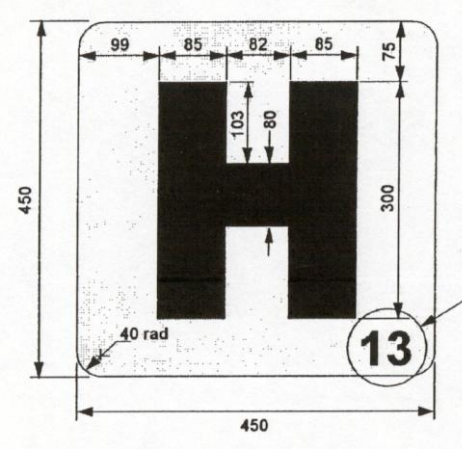
- Maintain a continuous watch over the haulout's position in relation to the harvester to avoid collision between machines or contact between the harvester's elevator and the haulout.
- Before turning or manoeuvring the haulout ensure that there is sufficient clearance for the harvester as serious damage can result from even minor collisions.
- Overfilling of haulouts leads to loss of cane in field and spillage both on roads and at sidings.

Communication

Radio communications and electronic warning signals are useful safety aids. In communicating with the harvester driver, mill or locomotive, the following procedures should be followed. This will also result in improved productivity and efficiency as coordination of haulout deliveries and locomotive pick up will be assured.

- All communication should be concerned with specific issues.
- Should be brief and to the point and acknowledged.
- Unnecessary chatter, abuse and inappropriate language are not tolerated.
- Example of process in calling mill –
  - Identify group no. eg "Group 86 to Traffic Office" (repeat twice)
  - Wait for response
  - Message
  - Wait for response
  - Acknowledge message received eg. "Group 86 to Traffic Office/Mill base, Message received."
- It is recommended that the harvesting contractor erect an 'H' board (including call sign) 500 metres from risk area. If this practice is not customary and a need is identified, consultation with the mill to introduce the practice is suggested. These harvesting warning signs must only be placed beside the track when harvesting is actually in progress and must be removed once the danger or hazard ceases to exist.

Below are two recommended designs:



Harvester group's radio frequency channel

For both signs:
Matt black lettering centered on yellow reflectorised background

Don't race the train

- It takes a loaded cane train travelling at 32klms per hour approximately 1 kilometre to come to a halt.
- Be aware of braking distances. Wet or slippery conditions increase braking distances. A haulout travelling at 32 kilometres per hour takes 13.75 metres to stop - a loaded cane train takes a far greater distance to stop.

SIDINGS

Introduction

A sugar mill siding is a busy workplace for both grower/harvester contractors and for mill cane transport workers. Apart from being a very busy environment, it is potentially very hazardous. As in other workplaces, hazards include the nature of equipment being used (powerful tractors and locomotives etc) and the physical environment (slippery cane billets, uneven ground etc). The key element that creates a uniquely hazardous environment, however, is that the siding forms a common workplace where representatives form distinctly different organisations with different missions are required to interact.

These guidelines provide only the *generic* operating procedures for the transfer of cane from infield transport equipment to the sugar factory's cane railway or road transport systems. Individual sugar factory cane areas may develop their own manuals incorporating specific local procedures which, through long usage, have been demonstrated to be inherently safe.

During the crushing season, delivery sidings must be used only for the purpose of transferring cane to the cane railway system except as necessary to provide access for farm operations.
All unattended plant and service equipment must be parked a minimum of 2.5 metres from and parallel to the nearer rail of any track.
All incidents, accidents or near misses which occur within the vicinity of the track and result in damage or injury or potential damage or injury must be reported to the factory traffic office and the contractor.

Visitors, unauthorised personnel and children should not enter the cane delivery siding workplace.

RAILWAY SIDINGS

[Road sidings (pads) – see page 25]

Mutual cooperation and communication among all parties working at a delivery point will ensure safe and efficient cane transfer operations. The prime objective of all parties is to make sure that the oldest cane arrives first at the mill.

General Responsibilities of the Parties

Sidings should be left in a clean, obstacle-free condition. Spilt billets are the responsibility of the haulout crew unless siding design contributes to the spillage. At regular and frequent intervals during the season, the contractor and/or grower using such an area is required to remove spilt billets and trash from the designated area except where local agreements differ from this procedure.

Maintenance of the easement, siding surface, access roads to and within the siding and delivery points are under the control of the sugar mill except where local agreements differ from this procedure.

Existing practices and procedures that have been demonstrated to be safe are to be maintained as part of these safety guidelines.

Contractor's Responsibilities

The contractor is responsible for the activities of the haulout crew at delivery sidings. Practices that should be undertaken at delivery sidings are listed below:

- The contractor should advise the traffic office when harvesting adjacent to the main line. Information must include specific location and expected duration of harvesting. If possible, harvesting warning signs should be used - see "Communication" on page 17.
- The contractor must ensure that spilt billets, trash and leaf matter covering the track are removed (unless caused by siding design).
- The contractor must not permit unauthorised persons, including children, within the delivery siding area during loading and unloading operations.
- Early advice of any delivery siding changes for empty cane bin deliveries due to the relocation of the harvesting group should be provided by the contractor. If this advice is received after the locomotive has departed from the sugar factory, the traffic office should be advised by radio.
- The contractor must contact the traffic office immediately when any cane bins (full or empty) have accidentally moved past the delivery siding clearance points and are foul of the main line.
- Movement of cane bins among sidings is not permitted unless authorised by the traffic office.

Haulout Driver's Responsibilities

- Your obligation under the Workplace Health and Safety Act requires that you report any incidents, accidents or near misses which occur within the delivery point and result in damage or injury or potential damage or injury must be reported to the sugar mill traffic office and your employer.
- As part of their responsibility, haulout operators must advise their employer/grower of any dangerous conditions or potential hazards.
- Cane bins and containers should be filled in sequence to ensure oldest cane goes first to the mill.
- Contact the traffic office describing any damage caused to cane trailers and cane bins.
- Ensure cane consignment tickets, or consignment note, is completed according to mill requirements.

Entering Sidings

Co-operation, not competition, is the key to safe working in this shared workplace.

- Look out for locomotives and any other cane haulage vehicles! Visibility can be restricted where sidings are adjacent to main rail lines or unharvested cane fields.
- Communicate using warning devices such as radio warning equipment (eg EvAlert), UHF or mobile phone to advise whereabouts - see "Communication" on page 17.
- Sugar mills have developed safe operating guidelines for their particular cane railway system. The following right of way procedures apply:
  - If a locomotive is shunting in the siding it is the duty of the haulout driver to wait until the locomotive has finished shunting and left the siding before commencing loading or unloading operation.
  - If a haulout vehicle is loading or unloading in a siding the locomotive crew must wait until the vehicle has finished operations before entering the siding.

Siding hazards

- Hazards include uneven ground resulting from lack of maintenance and poor siding design.
- Points, rails and spilt cane billets can also provide potential hazards for both haulout and cane railway crews.

Siding housekeeping

Sidings should be left in a clean obstacle free condition. Spilt billets are the responsibility of the haulout crew unless siding design contributes to the spillage.

Maintenance of the easement, siding surface, access roads to the siding and delivery points are under the control of the sugar mill.

What to do in the case of spillage, accident or breakdown

Accidents

Report all accidents or near misses to your employer immediately. If an accident occurs on mill land (railway siding, crossing or track), the Traffic Officer or appropriate Mill contact must also be advised.

Breakdown

Advise your employer immediately so that maintenance can be carried out and disruption to harvesting minimised. If the breakdown causes delays in filling bins, advise Traffic Officer or appropriate Mill contact

Spillage

Spilt cane billets can be a hazard and a danger to personal safety of both haulout drivers and locomotive crews. Spillage will be minimised if overloading does not occur. Haulout drivers should remove spilt billets and trash from the siding at regular intervals. Large quantities of spilt cane billets can cause personal injury to haulout drivers and locomotive crews and must be removed or reloaded into cane bins. When cane billets fall within the turnout region they can become lodged in the turnout mechanism or around the switch blade causing jamming.

When an excessive spillage of cane billets occurs, it should be removed as soon as possible by the operator/driver responsible. In the event of an excessive spillage, seek assistance from other crew members so that it can be removed as quickly as possible.

Over-filling of haulouts may result in spills on public roads which are hazardous to traffic. Should this occur, the haulout crew must clear the spillage from the road immediately.

Where the cause of the excessive spillage directly results from siding design, the sugar factory is responsible for removal. Should this situation occur, notify the traffic office immediately.

Clearing spilt billets should not be undertaken during haulout unloading or locomotive shunting operations.

Unloading Tippers and Elevator bins

- Beware of power lines;
- Ensure that haulout is on level and stable ground when unloading. The siding pad must be level if moving between rail bins with haulout bin raised;
- Never turn a haulout with either the elevator or bin raised. Ensure that the elevator and bin are lowered and the elevator door is closed before leaving the siding.
- Bins must be filled in sequence.

Handling bins

Take care when shunting, coupling and uncoupling bins. Accidents have occurred with persons jammed between bins. Never attempt to couple or uncouple moving bins

Roll-on/Roll-off

Ensure persons are not positioned between bins when bins are released from roll-on/roll-off trailers. Use safe practices when winching or pushing bins on to roll-on/roll-off trucks and tractors.

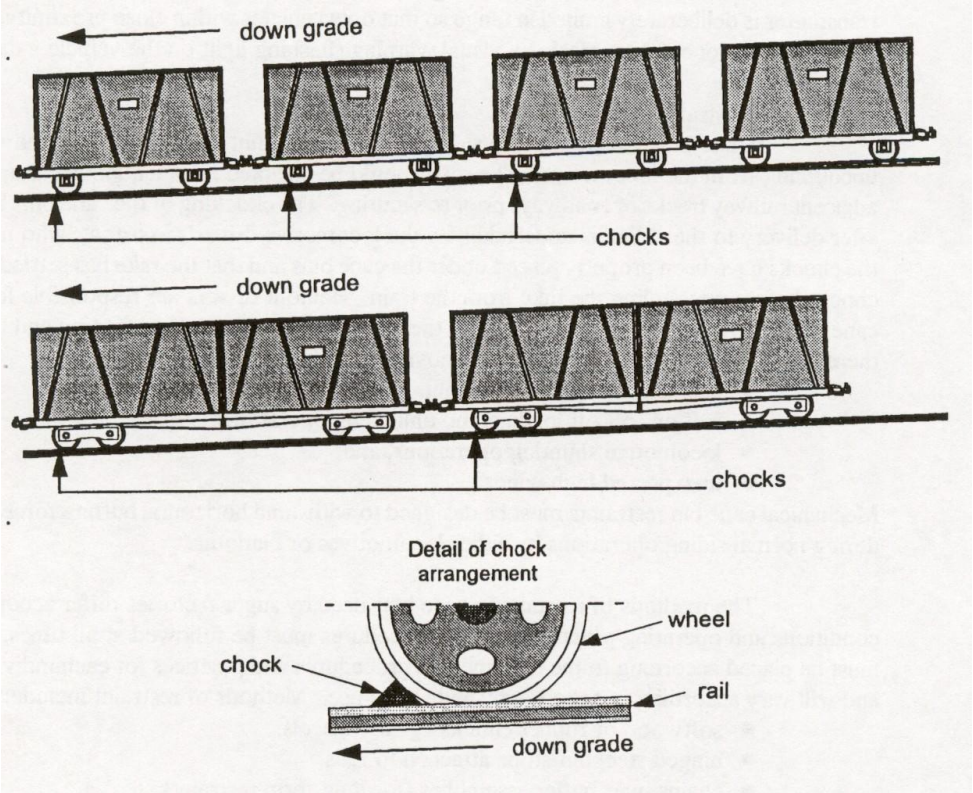
Restraint of Cane Bins

Cane bins left in delivery points or loops, or after being uncoupled from the locomotive, require some restraint to prevent their movement. The methods of restraining cane bins used by mills differ according to conditions and practice. The most common restraint uses chocks manufactured from softwood or other suitable timber of triangular cross section. This section deals, principally, with this method.

The following precautions should be observed when chocking is required -

- Chocks should be in good condition and free from oil or grease;
- Never attempt to chock moving bins
- The correct method for chocking bins is to place the chock on the rail and against the rim of the bin wheel between the wheel and the draw gear as shown in diagram below.
- If more than one chock is required, the extra chock should always be placed under the immediately adjacent bin. Two chocks must never be placed under the same bin.
- When using wire rope winches, ensure the wire rope is in safe condition and - stand clear! Clear points should be marked.
- No riding on full bins.
- Chocking must ensure that there is no possibility of the cane bins moving for any reason, including:
  - accidental impact by haulouts
  - unexpected high winds.

Following are diagrams showing correct chocking:



Exiting sidings

- Exit from the siding at the opposite end to entry (unless siding design does not permit). Do not reverse the haulout unless absolutely necessary.
- Watch for locomotives on main rail lines.
- Take extra care as full bins can obscure visibility of both road and rail traffic.

(These Guidelines continue on Page 34 for those not involved in delivery to Road Sidings)

ROAD SIDINGS (PADS)

Mutual co-operation and communication among all parties working at a delivery point will ensure safe and efficient cane transfer operations. The prime objective of all parties is to make sure that the oldest cane arrives first at the mill.

General Responsibilities of the Parties

Pads should be left in a clean, obstacle-free condition. Spilt billets are the responsibility of the haulout crew unless siding design contributes to the spillage. At regular and frequent intervals during the season, the contractor and/or grower using such an area is required to remove spilt billets and trash from the designated area except where local agreements differ from this procedure.

Maintenance of the easement, pad surface and access roads to pad are under the control of the sugar mill except where local agreements differ from this procedure.
Existing practices and procedures that have been demonstrated to be safe are to be maintained as part of these safety guidelines.

Contractor's Responsibilities

The contractor is responsible for all the activities of the haulout crew at delivery sidings. Practices that should be undertaken at road pads are listed below:

- The contractor must ensure that spilt billets, trash and leaf matter covering the pad are removed (unless caused by pad design).
- Contractors should ensure all reasonable steps are taken to avoid mud or cane billets being placed on roads and ensure any such spills are cleaned up immediately.
- The contractor must not permit unauthorised persons, including children, within the road pad area during loading and unloading operations.
- Early advice of any changes for empty container deliveries due to the relocation of the harvesting group should be provided by the contractor. If this advice is received after the truck has departed from the sugar factory, the Traffic Office should be advised by radio.

Haulout Driver's Responsibilities

- All incidents, accidents or near misses which occur within the delivery point and result in damage or injury or potential damage or injury must be reported to the sugar factory traffic office **and** your employer.
- Containers should be filled in sequence to ensure oldest cane goes first to the mill.
- Contact the traffic office describing any damage caused to containers.
- Provide the completed consignment note by the scheduled pick up time.

Entering Road Pads

Co-operation, not competition, is the key to safe working in this shared workplace.

- Look out for trucks and any other cane haulage vehicles! Visibility can be restricted where sidings are adjacent to main rail lines, roads or cane fields.
- Communicate using warning devices such as radio warning equipment (eg EvAlert), UHF or mobile phone to advise whereabouts - see "Communication" on page 17.
- Sugar mills have developed safe operating guidelines for their particular road pad system. The following right of way procedures apply:
  - If a truck is in the pad it is the duty of the haulout driver to wait until the truck has finished loading and left the pad before commencing to load or unload, unless the pad has adequate room to maintain separation.
  - If a haulout vehicle is loading or unloading in a pad, the truck driver must wait until the haulout has finished operations before entering the pad.
- Ensure all personnel and other vehicles remain clear of the tipping arc of a raised vehicle at all times.

Pad hazards

- Hazards include uneven ground resulting from lack of maintenance and poor siding design.
- Spilt cane billets can also provide potential hazards for both haulout crews and truck drivers.

Pad housekeeping

Pads should be left in a clean obstacle free condition. Spilt billets are the responsibility of the haulout crew unless pad design contributes to the spillage.

Maintenance of the easement, pad surface and access roads to the pad are under the control of the sugar mill.

What to do in the case of spillage, accident or breakdown

Accidents

Report all accidents or near misses to your employer immediately. If an accident occurs on mill land (road pad, crossing or track), the Traffic Officer/Mill base must also be advised.

Breakdown

Advise your employer immediately so that maintenance can be carried out and disruption to harvesting minimised.

Spillage

Spilt cane billets can be a hazard and a danger to personal safety of both haulout drivers and truck drivers. Haulout drivers should remove spilt billets and trash from the pad at regular intervals. Large quantities of spilt cane billets can cause a raised vehicle to tip.

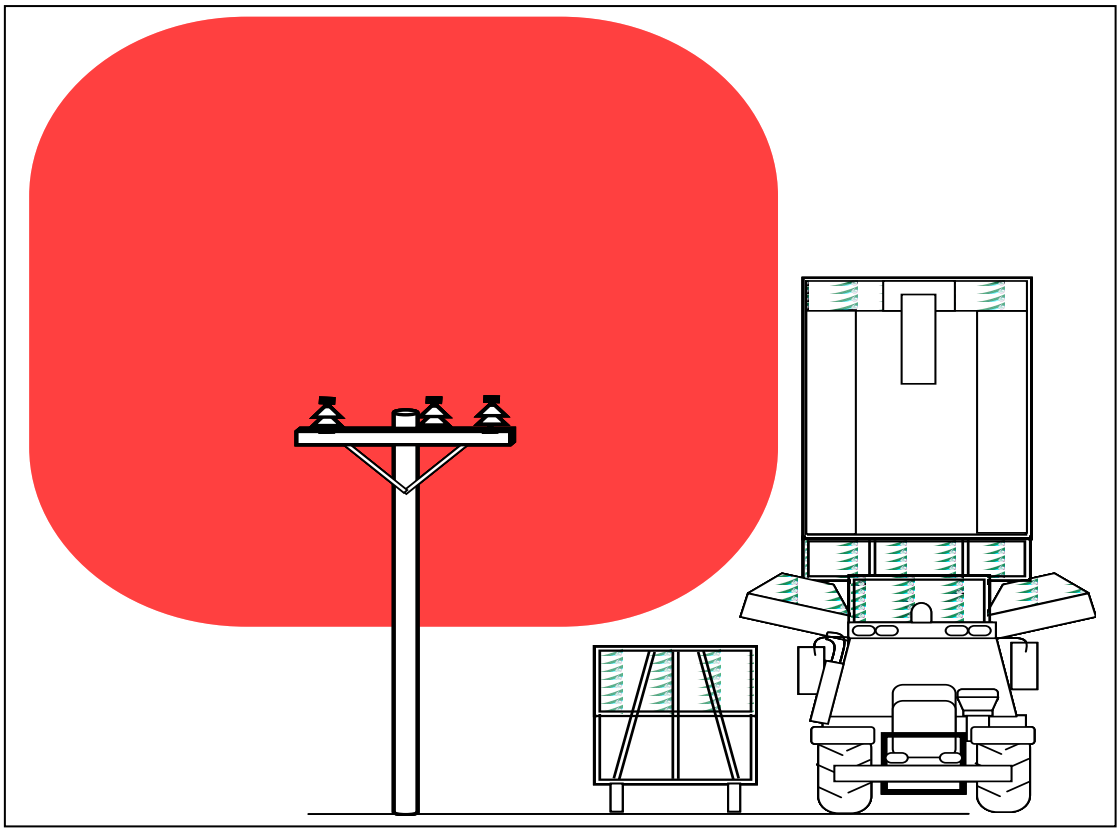
When an excessive spillage of cane billets occurs, it should be removed as soon as possible by the operator/driver responsible. In the event of an excessive spillage, seek assistance from other crew members so that it can be removed as quickly as possible.

Over-filling of haulouts may result in spills on public roads which are hazardous to traffic. Should this occur, the haulout crew must clear the spillage from the road immediately.

Where the cause of the excessive spillage directly results from pad design, the sugar factory is responsible for removal. Should this situation occur, notify the traffic office immediately.Clearing spilt billets should not be undertaken during haulout unloading or truck operations.

Unloading Tippers and Elevator bins

- Give right of way to a truck operating at the pad and do not enter unless pad design allows for separation.
- Ensure all personnel and other vehicles remain clear of the tipping arc of a raised vehicle at all times.
- Ensure that haulout is on level and stable ground when unloading. The pad must be level if moving between containers with haulout bin raised.
- Fill containers in sequence.
- Never turn a haulout with either the elevator or bin raised. Ensure that the elevator and bin are lowered and the elevator door is closed before leaving the siding.
- Beware of power lines. Beware side tipper operation doesn't encroach within the 3m Exclusion Zone (shaded area below) when operating at a delivery point.



Exiting pad

- Exit from the pad at the opposite end to entry (unless design does not permit). Do not reverse the haulout unless absolutely necessary.
- Take extra care as full bins can obscure visibility of both road and rail traffic.

Workshop and Field Maintenance Safety

General

The following points provide minimum requirements for servicing and maintaining machinery. Please refer to the relevant Operator's Manual for specific servicing and maintenance procedures.

- Wear suitable clothing when operating or working on a machine. Loose clothing and/or unsecured long hair are hazards.
- Park machine on firm flat ground for servicing.
- Always apply the parking brake before leaving the control cabin.
- Ensure that only one person has the key to the haulout unit.
- Switch off engine and remove key from ignition.
- It is strongly recommended that if a machine is to be serviced, a Personal Danger Tag be placed in the designated position.
- Ensure that an operational fire extinguisher is easily accessible at all times.
- Do not carry out any maintenance with the engine running.
- Do not, under any circumstances, carry out maintenance under raised sections unless safety stays have been locked in position. Ensure that the safety stays are disconnected before lowering the equipment.
- **Do not service machines whilst the engine is running.** If necessary to make checks with the engine running, always use two persons. One must stay at controls while the other performs the check.
- Prior to starting the unit, check around the unit for any obstruction and warn any person on the ground that the vehicle will be reversing and to stand clear to a distance of 20 metres.
- Always sound the horn before starting or driving off.
- Purchase and fit a reversing beeper if the unit is not supplied with one.
- When working with others, choose a group leader and work according to his instructions. Do not perform any maintenance beyond the agreed work.
- Do not jack up a machine unless the jack and the machine are on very firm ground. Make sure there is a firm foundation under the jack. Use stands where practical.
- Fuel, anti-freeze and oil are dangerous substances. Never handle fuel, grease, oil or wear oily clothes in places where there is any fire or flame; **do not smoke while refuelling.**
- To minimise fire risk due to static electricity discharge during refuelling, ensure that the hose nozzle is kept in physical contact with the fuel tank filler.
- Battery Electrolyte WARNING - If the electrolyte gets on your skin or clothes, immediately wash with plenty of clean water.

- **Caution** - to avoid gas explosions, do not bring fire or sparks near the battery.
- Exhaust gas is dangerous. When running the engine for prolonged periods in poorly ventilated areas, there is a danger of gas poisoning. Open the windows or doors to ensure a good supply of fresh air.
- Prior to starting the unit, check round the unit for any obstruction and warn any person on the ground that the vehicle will be reversing and to stand clear to a distance of 20 metres.

Safety Stays

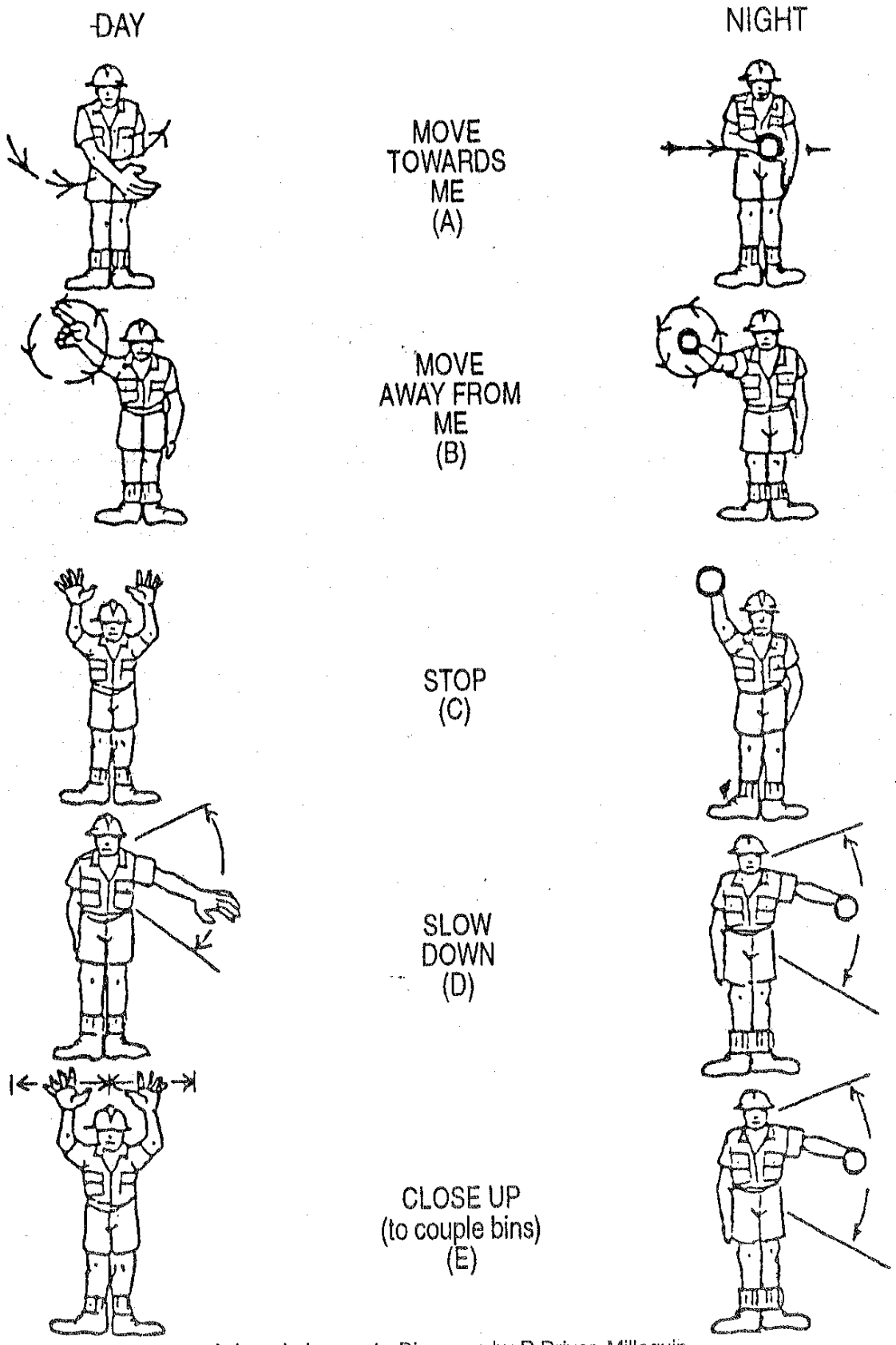
When working under a machine use appropriate safety stays and supports in case of mechanical or hydraulic failure. Remove safety stays and supports before operating the machine.

- Never use makeshift lifting gear when working on cane haulage vehicles.
- Use a wide-based jack and make sure its lifting capacity is adequate for the load. If you jack up a tractor, block it for extra support. Never rely solely on the tractor hydraulics when working under raised equipment.

Tyre Safety

- Before removing a tyre from the rim, ensure that all the air has been released. Split rims can be especially dangerous. Inflate tyres in a cage for safety.

Recommended signals for Harvesting and Haulout Operations



Acknowledgement - Diagrams by R Driver, Millaquin

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FORM 3
V2.07-03

Queensland Government
Department of Industrial Relations
ABN 62 293 849 579

ORIGINAL

INCIDENT NOTIFICATION FORM

READ NOTES / DIRECTIONS PRIOR TO COMPLETION OF THIS FORM – PLEASE PRINT

Electrical Safety Act 2002
Workplace Health and Safety Act 1995

Type of incident
☐ work injury ☐ serious bodily injury ☐ work caused illness ☐ dangerous event ☐ dangerous electrical event
Notify Department of Industrial Relations ☐ Yes ☐ No ☐ serious electrical incident
Was injury/illness fatal? ☐ Yes ☐ No If an electrical incident, has the area been made safe? ☐ Yes ☐ No

Details of injured person
Given names | Surname
Residential Address | D.O.B.
Postcode
☐ Male ☐ Female

Basis of employment
Full time ☐ Part time ☐
Casual ☐ Volunteer ☐
Member of public ☐ Other ☐
Self-employed ☐

Type of employment
Occupation
Administration ☐ Tradesperson ☐ Apprentice/trainee ☐
Technical ☐ Professional ☐ Student ☐
Other ☐

Nature of work injury or work caused illness, eg. fracture, sprain & strain, electrical shock, burns, etc.

Bodily location of injury or work caused illness

Medical treatment ☐ nil ☐ first aid ☐ doctor only ☐ hospital admitted to: (if overnight)

Mechanism of injury/disease
Falls, trips and slips ☐ | Sound and pressure ☐ | Biological factors ☐
Hitting objects with part of body ☐ | Body stressing ☐ | Mental stress ☐
Heat radiation and electricity ☐ | Chemicals and other substance ☐ | Other and unspecified mechanisms of injury ☐

Agency of injury/disease
Machinery and (mainly) fixed plants ☐ | Mobile plant and transport ☐ | Animal, human and biological agencies ☐
Powered equipment, tools and appliances ☐ | Non-powered handtools, appliances and equipment ☐ | Environmental agencies ☐
Chemicals and chemical products ☐ | Materials and substances ☐ | Other and unspecified agencies ☐

Details of how incident occurred
Day Month Year Time of incident: ☐☐☐☐ am/pm
Description of Incident (Attach report)

Name of employer/self-employed person/principal contractor

Address of employer/ self-employed person/ principal contractor

Location address of workplace where incident occurred

Name of W.H.S.O. and phone no. (If any) Phone ( )

Employer/Self-Employed Person/Principal Contractor Signature
Day Month Year

OFFICE USE ONLY

District Reference No. ☐☐☐☐☐☐☐☐☐☐
Plant No. ☐☐☐☐☐☐☐☐☐☐
Date: Day Month Year
Workplace/Construction Workplace No. ☐☐☐☐☐☐☐
Licence No.

Action

PRIVACY STATEMENT. The Department of Industrial Relations respects your privacy and is committed to protecting personal information. The information provided on this form is for the purpose of advising Workplace Health and Safety Queensland and/or the Electrical Safety Office of a reportable incident and will be managed within the requirements of Information Standard 42, Workplace Health and Safety Regulation 1997 and Electrical Safety Regulation 2002. For reasons of health and safety the Department may be required to disclose the personal information contained in this form to other government agencies or entities, or as may be required by law.
Further information on our privacy policy is available on our website www.dir.qld.gov.au.

WORKPLACE RECORD

COMPLETE FOR REPORT TO WORKPLACE HEALTH AND SAFETY (Refer Reverse Page)

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Appendix 3

EMPLOYER COPY – (please print)

I (name of employee)……

Employed by (name of employer)……

Acknowledge receipt of these "Safety Guidelines for Harvesting and Transport of Sugar Cane" and that compliance with these practices forms a part of my contract of employment and my commitment to work safety.

Signed ……..……

Date ……/……/……

This is to certify that (name of employee) ……

has undergone a safety instruction course for harvesting, hauling-out and delivery of harvested cane at (job location)……on (date) …/ /….

Signed (Employer or
Employer Representative …….……..

Signed (Employee) ……

1. Next of kin – Name:……

Phone No:……

2. Blood Group:……

3. Allergies:……..

4. Health details (ie. Diabetes, Colour Blindness, Deafness, Back Injuries etc):

……

……

5. Date of Birth:……

6. Religion (optional):……

7. Tax File No:……..

8. Austsafe Memberhsip No:……

NOTE: THIS PAGE IS TO BE RETAINED BY THE EMPLOYER