



REFERENCE

Work health and safety in the plant-export environment

Purpose of this document

This document provides useful information and recommendations to inspection authorised officers (AO) on work health and safety (WHS) during plant-export inspections.

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Introduction

In performing their duties, an inspection authorised officer (AO) takes reasonable care of their own health and safety, and the health and safety of others.

By the end of this reference you should be aware of:

- the Commonwealth, state and territory work health and safety (WHS) legislation
- WHS instructions (including guidelines and work instructions) related to inspection tasks
- personal protective equipment
- common hazards and risks related to plant-export operations
- reporting hazards, near misses and incidents.

Work Health and Safety Act 2011

The [Work Health and Safety Act 2011](#) (the Act) and subordinate legislation provides for a balanced and nationally-consistent framework to secure the health and safety of workers and workplaces.

In implementing the Act and subordinate legislation, states and territories have made variations in order for the laws to operate effectively in each jurisdiction.

Keeping an up-to-date knowledge of the Act, subordinate legislation and state and territory variations will help you understand your roles and responsibilities and those of others, with regards to WHS.

Plant-export WHS

Undertaking activities in unfamiliar locations

As an inspection AO, you may be required to undertake activities in unfamiliar locations. Some examples of inspection locations include:

- grain stores
- log yards
- wharves
- ships and other marine vessels
- packing sheds
- cold stores.

When arriving at an unfamiliar workplace it is important to make yourself aware of any site-specific requirements. This may be in the form of an induction (adequate instruction and training from the appropriate representative about the conditions and safety requirements), or you may be escorted by a site representative at all times while on site.

If you don't receive an induction and an escort is not provided, complete a [Take 5 checklist](#) before entering the site. This will help you to identify hazards before commencing work, and enable you to put controls into place to manage any identified risks.

Task-specific WHS guidance is provided in guidelines and work instructions on [the Plant Export Operations Manual](#).

Department of Agriculture and Water Resources Inspection Services Group

Departmental AOs should also be aware of relevant departmental WHS instructions published in the [Instructional Material Library](#).

Personal protective equipment

Personal protective equipment (PPE) is anything used or worn by a person to minimise risk to the person's health or safety and includes a wide range of clothing and safety equipment.

The Reference: [Plant exports guide – Equipment](#) provides information on some of the common types of PPE used for inspections.

Common hazards and risks related to plant export operations

Safe driving

Symptoms of driver fatigue

One of the key symptoms of driver fatigue is impaired judgement, which may reduce the ability to accurately self-assess levels of fatigue. Other symptoms may include:

- yawning
- reduced concentration and reaction times
- irritability
- restlessness
- difficulty steering.

Managing driver fatigue

It is important to note that fatigue is not only related to the time spent driving, but also to hours of wakefulness and the time of day. Typically, high-risk times are those between 10 pm and 6 am, and it is safest to try and avoid driving between these times wherever possible.

Some of the ways to manage driver fatigue include monitoring work requirements during peak seasonal activities, and factoring in suitable rest periods into travel times.

Consideration should also be given to alternative means of transport where available.

Driving with third party providers

In some cases you might share transport with other people travelling to, from or around a third party worksite. If at any time you do not feel safe with other drivers, you may cease work, or terminate the travel.

Driving under the influence of alcohol or drugs

Driving involves basic skills such as attention, judgment, perception, decision-making, physical reaction—and the ability to coordinate these skills. Drivers under the influence of any behaviour- or mood-altering drug or alcohol may present a road safety hazard.

Vision and driving

Good vision is essential when driving. This includes an adequate field of vision to detect other vehicles, cyclists and pedestrians to the side of the line of vision, and the ability to see and assess moving objects at distance. While eyesight is checked at licence renewal, undergoing additional testing is a good idea if you think you may be experiencing any deterioration in sight.

Road and traffic laws and driver penalties

It is important to adhere to road traffic regulations at all times, including the requirement to hold a current driver's licence appropriate for the class of vehicle you are driving. It is the law to follow any traffic-management plans or signage such as speed limits, allocated parking or designated roads.

Oversized vehicles

Large vehicles are often listed as a source of concern for motorists nationally, and significant numbers of people die as a result of crashes between trucks and cars or motorcycles. Research

indicates that a lot of the problems associated with sharing the road with heavy vehicles is that many motorists are not aware of the limitations and potential hazards associated with trucks.

At 80 kilometres per hour, it will typically take a truck-trailer unit more than twice the distance to stop than a car, due to the weight of the unit and the design of the brakes. Any motorist who cuts in front of a truck and suddenly slows is at risk of causing a serious rear-end crash. Even if the truck driver manages to avoid a collision by swerving or braking quickly, this can cause a dangerous load shift that may in itself lead to a crash.

Overtaking turning heavy vehicles

Trucks often need to cross the centre line when turning a corner, particularly when entering or exiting small roundabouts and when making a left-hand turn. It is safe practice to take note of the indicators in use in addition to the movement of the truck and not to pass a truck that is turning.

Mobile phones and radios

Engaging in conversation whilst driving, using either a hand held or hands-free kit, can affect reaction times, judgement, and awareness of other traffic. Therefore it is safest not to initiate or receive calls using mobile phones, CB or truck radios unless the vehicle is stationary.

Switching phones off whilst driving, and retrieving messages during rest breaks and/or on arrival at the intended destination, is a good practice to avoid distraction.

City and country driving

Drivers driving in unfamiliar surroundings are at an increased risk of having a fatal crash. The majority of crashes for city people driving on country roads are due to fatigue (driving long distances), alcohol, speed and driver error (or a combination of these). The condition of rural roads also may create a driving hazard.

Trip planning

Driving long distances, and over country roads, increases the risks associated with driving. Creating a trip itinerary and plan is a tool to help you manage driving risks.

During the trip-planning phase, some useful questions to ask yourself include:

- Are other meeting/inspection options available (e.g. tele/video conferencing, contracting out inspection, etc)?
- Can the meeting/inspection be moved to minimise travel requirements?
- Has adequate time been provided to allow trip-planning details to be organised and approved?
- Are other forms of transport (e.g. planes, trains, buses) available?
- Is it possible to share the driving?
- Has the recommended training been completed (if applicable)?
- Are there adequate places for breaks along the route?
- Is overnight accommodation required to minimise driver fatigue?

Some other useful considerations include:

- limiting total driving and working time to less than 12 hours in any 24-hour period
- taking alternate transport for journeys over 500 kilometres in one direction
- taking alternate transport and/or reducing driving time if weather conditions are poor or worsen during the journey
- limiting driving time if you, the driver, has not had a regular period of sleep of at least 7–8 hours during the last 24 hours
- using two or more drivers for long distance trips
- taking a break from driving and having a rest every two hours

- avoiding driving at night, where possible
- discussing with your treating practitioner the possible effects on driving of any long-term medication you are taking
- wearing a seat belt at all times when the vehicle is in motion
- keeping the headlights on during daytime driving
- carrying a working mobile phone or other communication device (e.g. two-way, satellite phone) if you are travelling in remote areas or driving distances greater than 50 kilometres outside a major regional centre or city
- arranging overnight accommodation if you believe you are at risk of, or before the driver starts to show signs of, fatigue.

Fatigue management

Fatigue is a state of mental and/or physical exhaustion which reduces a person's ability to perform work safely and effectively. Fatigue can be caused by factors that may be work-related, non-work-related or a combination of both, and can accumulate over time.

Fatigue can occur because of prolonged mental or physical activity, sleep loss and/or disruption of the internal body clock.

Effects of fatigue

Fatigue reduces alertness, which may lead to errors and an increase in incidents and injuries, particularly when:

- operating fixed or mobile plant, or vehicles
- undertaking critical tasks that require a high level of concentration.

As the number of fatigue-related hazards add up, the risk of injury will likely increase. For example, the risk of a fatigue-related injury would likely increase if working long hours and undertaking a physically or mentally demanding task.

Managing fatigue

You can manage and limit excessive working hours by:

- taking adequate breaks to rest, eat and rehydrate
- designing working hours and rosters to allow opportunity for good sleep and enough recovery time between work days or shifts for travelling, eating, washing and sleeping.

Horticulture inspections—hazards and risks

There are a range of WHS risks to consider when conducting horticulture inspections. The following sections articulate some specific risks that inspection AOs should be aware of.

Inspection premises and areas

Commonly-encountered WHS risks at inspection premises and areas include:

- pedestrian/vehicle/mobile plant (e.g. forklifts) interaction when entering and exiting the inspection premises and inspection area
- insufficient lighting at the inspection surface
- inspection area not adequately delineated from other operational activities.

Consignment stacking

In most places (such as packing establishments and cool stores), goods are stacked in a variety of ways and to differing heights. In some environments unstable stacking of heavy goods in workplaces has led to serious injury and even death.

If you feel that the stacking of the consignment is unsafe, you can ask an establishment representative to alter the configuration of the consignment so that it does not pose a risk to you or others. Be careful of forklift movements during this process and remain in a safe position until the consignment is ready.

Exposure to cold

Consignments of fresh produce are often kept in a cool room to maintain the integrity of the product. The cold storage area can present a number of environmental hazards that officers should consider, including but not limited to:

- exposure to extreme cold
- slippery (wet/ice) floors
- mobile plant working in area
- falling pallets or goods
- accidental release of refrigerant gas (ammonia).

Chemical residue on produce

In order to produce high-quality horticultural produce free from pests and disease, farmers often use a number of chemical treatments and controls. Although this may have been carried out a long time before you conduct the inspection, you cannot be sure that no residual chemicals remain on the produce.

Wear gloves to prevent direct-skin contact with any chemical residues. And remember to remove the gloves, and wash your hands prior to touching your eyes, mouth or nose, or eating.

Using knives

Knives are commonly used by AOs and it is important that you are aware of the potential risks associated with knife usage.

Observing the following points when using a knife, and ensuring that you understand any ongoing maintenance, care and storage requirements for your knife will help to prevent knife-related injuries.

When opening lock knives:

- hold the knife in one hand and put the thumbnail of your other hand into the nail slot
- pull the blade out whilst pushing against the hinge with a finger of the left hand holding the knife
- hold onto the handle and blade until the blade snaps into the open position.

When using knives:

- ensure that your knife is in good condition before use
- cut away from your body, and other people
- do not use a blunt or damaged knife.

When closing knives:

- hold the handle on one hand and keep fingers safely on the sides
- push against the back of the blade with fingers of other hand, whilst pushing against the hinge with a finger of the hand holding the knife and swinging the handle up to meet the blade
- allow the knife to snap shut.

Slips, trips and falls

There could be a number of factors contributing to slips, trips and falls at a worksite such as:

- cables and hoses that are not stored away safely, or not used with appropriate signage to warn people that they might trip over the cable or hose
- failing to keep the worksite tidy and free of items that may cause a slip, trip or fall
- liquid or produce spillage.

Grain and seed inspections—hazards and risks

There are a range of WHS risks to consider when conducting grain and seed inspections. The following sections outline some specific risks that inspection AOs should be aware of.

Inspection premises and areas

Commonly-encountered WHS risks at inspection premises and areas include:

- ability to take samples, from the flow path for inspection
- sufficient space around stacks of bags to allow access to all bags
- pallets being stacked too high
- insufficient lighting at the inspection surface.

Moving belts at inspection points

Bulk-grain inspection requires you to work in an environment with machinery and moving belts. Loose clothing and long hair can be caught on moving machinery parts.

Slowing or stopping the belt to collect your sample will help you to avoid injury. Note the location of the Emergency Stop button, so it can be activated in the case of an emergency.

Truck and mobile plant movements around worksites

There may be significant movement of trucks or mobile plant at work sites. Being aware of your environment will help you to avoid unnecessary incidents.

Some useful tips:

- walk on designated paths
- take note of the safety signage
- look and listen for truck or mobile plant movement
- do not approach a truck or mobile plant unless it has stopped
- do not stand at the rear of the truck or mobile plant while it is unloading
- avoid the use of mobile phones or other portable electronic devices near refuelling areas or supplies.

Dust hazards

As grain is being unloaded or moved around there is often a lot of dust in the air. Wear an appropriate respiratory mask to reduce the likelihood of inhaling dust. Wear safety glasses or goggles to reduce the risk of injuring your eyes. If you consider the amount of dust poses a risk to your health and safety, you can leave the area until it is suitable to re-enter.

Noise

Excessive noise in the workplace can drown out sounds that would otherwise warn of imminent danger, and expose you to hazards that may lead to accidents and near misses.

Excessive noise can also permanently damage your hearing: wear suitable ear protection in designated areas to reduce the likelihood of damaging your hearing.

Slips, trips and falls

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- cables and hoses that are not stored away safely, or not used with appropriate signage to warn people that they might trip over the cable or hose
- failing to keep the worksite tidy and free of items that may cause a slip, trip or fall
- liquid or grain spillage.

Posture and manual handling

Grain sampling on belts involves looking down for long periods of time. To avoid strain and overuse injury, take adequate breaks, change positions and do stretching exercises that focus on the muscles you use for the work you are doing.

When handling loads be aware of posture and manual-handling techniques. Reduce your manual handling to a minimum, where practicable, and seek assistance to help you avoid injury.

Bulk vessel inspections—hazards and risks

There are a range of WHS risks to consider when conducting empty-bulk-vessel inspections. The following sections outline some specific risks that inspection AOs should be aware of.

Inspection premises and areas

Commonly encountered WHS risks at inspection premises and areas include:

- pedestrian/vehicle/mobile plant (e.g. forklifts) interaction when entering and exiting the inspection premises and inspection area
- falling objects
- sunburn
- the health and behaviour of crew members.

Slips, trips and falls

There could be a number of factors contributing to slips, trips and falls at a worksite such as:

- uneven or slippery surfaces
- weather conditions (rainfall and heavy winds creating vessel movement)
- unstable ground surface
- hatch or manhole left open.

Empty bulk vessels

Empty bulk vessel inspections require you to board empty bulk vessels and inspect parts of those vessels, including empty holds.

Boarding empty bulk vessels

Commonly encountered WHS risks associated with boarding empty bulk vessels at berth or at protected anchorage include:

- transferring between two vessels:
 - poor weather/sea conditions
 - vessel movement in the water
 - vessel thrusters or drive propeller
 - seasickness
- distance from shore
- heights

- ladders
- faulty equipment
- equipment bulk
- slips, trips and falls
 - exposure to chemical hazards in water
 - exposure to biological hazards in water
 - exposure to cold water
- fire or explosion
- the health and behaviour of crew members
- difficulties maintaining communication
- fatigue

Inspecting empty bulk vessels

Commonly encountered WHS risks associated with inspecting empty bulk vessels include:

- mooring lines and ropes, and their 'snap back' zone
- sharp objects/edges
- structures and objects at head height
- ladders
- heights
- faulty equipment
- damaged structures
- staying with the escorting lead crew member
- the health and behaviour of crew members
- exposure to extreme temperatures
- sunburn
- excessive or inadequate lighting
- poor weather/sea conditions
- difficulties maintaining communication with the vessel crew
- exposure to biological pathogens
- insect bites or stings
- access to first aid equipment.

Dust hazards

As goods are being unloaded or moved around there is often a lot of dust in the air. Wear an appropriate respiratory mask to reduce the likelihood of inhaling dust. Wear safety glasses or goggles to reduce the risk of injuring your eyes. If you consider the amount of dust poses a risk to your health and safety, you can leave the area until it is suitable to re-enter.

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Fumigation

Methyl bromide and phosphine are fumigants often used to treat grain for pests. Although AOs are not directly involved with the fumigation of a consignment, you may be required to order goods or transport units (ship holds, empty containers) for fumigation and conduct follow-up inspections.

Before conducting an inspection of a container or empty vessel hold, it is important to be sure that they do not pose a risk to your health. A Fumigation Certificate and Gas-Free Certificate will indicate the monitored level of gas remaining.

Using a gas-monitoring device

A photo-ionising detector (PID) is a gas-monitoring device that measures volatile organic compounds and other gases in concentrations from sub parts per billion to 10,000 parts per million (ppm). PIDs produce instantaneous readings, operate continuously, and may be portable and hand-held instruments. PIDs can be used as a control measure to manage exposure to a chemical hazards and safe oxygen levels.

Empty container inspections—hazards and risks

There are a range of WHS risks to consider when conducting empty-container inspections. The following sections articulate some specific risks that inspection AOs should be aware of.

Inspection premises and areas

Commonly encountered WHS risks at inspection premises and areas include:

- pedestrian/vehicle/mobile plant (e.g. forklifts) interaction when entering and exiting the inspection premises and inspection area
- falling objects
- sunburn
- hearing damage or loss
- the health and behaviour of crew members.

Slips, trips and falls

There could be a number of factors contributing to slips, trips and falls at a worksite such as:

- uneven or slippery surfaces
- container floor lining damaged or uneven
- unstable ground surface
- failing to keep the worksite tidy and free of items that may cause a slip, trip or fall.

Containers

Empty container inspections require you to enter empty containers. Some risks associated with entering empty containers include:

- being struck by opening or closing container doors
- possible confinement in a dry box or refrigerated container
- low oxygen levels
- exposure to chemicals
- being inside a container when it is moved
- sharp objects/edges
- exposure to extreme temperatures
- excessive or inadequate lighting
- insect bites or stings.

Dust hazards

As goods are being unloaded or moved around there is often a lot of dust in the air. Wear an appropriate respiratory mask to reduce the likelihood of inhaling dust. Wear safety glasses or goggles to reduce the risk of injuring your eyes. If you consider the amount of dust poses a risk to your health and safety, you can leave the area until it is suitable to re-enter.

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Reporting hazards, near misses and incidents

What is an incident or near miss?

An incident or near miss is any unplanned event where a person actually suffers a work-related injury or illness, or an event occurs that has potential to result in injury or illness or fatality respectively (i.e. a near miss).

Why is it important to report hazards, incidents and near misses?

By reporting WHS hazards, incidents, and near misses:

- immediate action can be taken to ensure workers and others are safe
- preventative action can be taken to reduce the risk of future harm
- early support and intervention can be provided to injured workers
- it can be determined where additional information, instruction, training and supervision may be required to enable workers to work safely
- information and consultation can occur with effected workers and their representative regarding the management of risks to health and safety
- the relevant commonwealth, state or territory regulators can be notified of certain types of incidents in the timeframe prescribed in the Act.

What are the reporting requirements?

Task-specific WHS reporting requirements are outlined in guidelines and work instructions on the [Plant Export Operations Manual](#).

Related material

- [Work Health and Safety Act 2011](#) and subordinate legislation
- [Plant Exports Operations Manual \(PEOM\)](#)
 - Guidelines
 - Work instructions
 - Reference: *Plant exports guide – Equipment*
 - Reference: *Pre-entry hazard assessment for third party worksites including bulk vessels (Take 5 checklist)*
- [Instructional Material Library](#) (departmental AOs only)
 - Guideline: *Managing fatigue*
 - Guideline: *Managing hazardous manual tasks*
 - Guideline: *Personal protective equipment*
 - Work instruction: *How to report a health and safety hazard*
 - Work instruction: *How to report a health and safety incident*

Contact information

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1.0	6/11/2017	First publication of this reference.
2.0	15/06/2018	Addition of requirements for inspecting bulk vessels at protected anchorage.