Issues paper – October 2021

Rural Plant Code of Practice 2004 review

Workplace Health and Safety Queensland
worksafe.qld.gov.au

Queensland Government

Introduction

The Queensland Government's Office of Industrial Relations (OIR) is responsible for the development and enforcement of work health and safety laws across the State.

We work closely with the Commonwealth Government and other states and territories through Safe Work Australia (SWA) to develop and maintain a suite of model laws and codes of practice. The *Work Health and Safety Act 2011* (the WHS Act) and the Work Health Safety Regulation 2011 (the WHS Regulation) are model laws that have been adopted by Queensland, with minor variations.

An approved code of practice is a practical guide to achieving the standards of health, safety and welfare required under the WHS Act and the WHS Regulation.

The *Rural Plant Code of Practice 2004* (the Code) has undergone two minor desktop reviews in 2012 and 2018, however has not been substantially reviewed since it commenced in 2004. Since this time the industry landscape has changed significantly from a safety and technological perspective.

From 1 July 2018, duty holders are required to comply with either an approved code of practice under the WHS Act or follow another method, such as a technical or an industry standard, if it provides an equivalent or higher standard of work health and safety to the standard required in the approved code of practice.

A code of practice applies to anyone who has a duty of care in the circumstances described in the code. In most cases, following an approved code of practice would achieve compliance with the health and safety duties under the WHS Act, in relation to the subject matter of the approved code of practice. Like regulations, codes of practice deal with particular issues and do not cover all hazards or risks which may arise. The health and safety duties require duty holders to consider all risks associated with work, not only those for which regulations and codes of practice exist.

Codes of practice are admissible in court proceedings under the WHS Act and the WHS Regulation. Courts may regard a code of practice as evidence of what is known about a hazard, risk or control and may rely on the code of practice in determining what is reasonably practicable in the circumstances to which the code of practice relates.

An inspector may refer to an approved code of practice when issuing an improvement or prohibition notice. This may include issuing an improvement notice for failure to comply with a code of practice where equivalent or higher standards of work health and safety (WHS) have not been demonstrated.

About the review

The purpose of the review is to consider what changes are necessary to ensure the Code remains fit-for-purpose, is relevant and effective, and supports industry to meet its WHS legislative obligations, which ensures the safety of workers who operate rural plant in the Agriculture industry.

Farm machinery has the potential to kill and maim; the risk of fatalities and incidents in rural workplaces is real— from January 2015 to 31 March 2021, there have been 67 work-related fatalities in the Agricultural, Forestry and Fishing Industry in Queensland. This includes 30 (45 per cent) involving a vehicle or some sort of mobile plant, with eight of these involving a quad bike (12 per cent).

Scope of the review

The Code will not be introducing new legislative requirements; it will provide practical guidance to persons who conduct a business or undertaking and have management or control of rural plant in the workplace, as well as other people who have duties under the WHS legislation in relation to rural plant. It should be read in conjunction with the WHS Act, WHS Regulation and other relevant codes of practice.

The Code includes information about certain requirements under the *Electrical Safety Act 2002* and the Electrical Safety Regulation 2013, however it is not an approved code under the *Electrical Safety Act 2003*. Persons with duties under electrical safety legislation should refer to that legislation to ensure compliance with electrical safety requirements relating to rural plant.

Overview of the Code

The Code provides practical guidance on managing the work, health and safety risks associated with the operation of rural plant.

The current Code outlines:

- How to manage and identify risks from rural plant
- Risk Controls for rural plant
- Duties to provide producers/growers safety information on rural plant
- Principles for consultation between persons conducting a business or undertaking, workers and others
- Preventative measures for the safe operation of rural plant
- Management of specific plant risks for tractors, quad bikes, side-by-side vehicles, electrical risks, working at heights or confined space, and other specific risks
- Training requirements.

The review will focus on but is not limited to:

- planters
- harvesters
- hoppers
- silos
- farm vehicles (e.g. tractors, quad bikes and side-by-side vehicles)
- electric tools (e.g. saws, drills, grinders)
- irrigation equipment
- workshop tools and equipment
- implements.

Approach

The review will incorporate the following three consultation approaches:

- Publication of this issues paper online, seeking written submissions from all interested parties by late 2021.
- Targeted consultation by OIR with external stakeholders throughout late 2021 and early 2022.
- Convening of a high-level Steering Group, to provide advice to OIR on technical matters in 2022.

Written submissions are sought from all interested parties on any of the key issues that have been identified in this paper. In addition, you are invited to respond to the specific questions posed at the end of this paper.

Assessing the Code

A number key areas have been identified as requiring significant review.

Tractor roll-over protection

Tractors are common items of plant commonly used in rural workplaces and often cause injuries and deaths. Tractor-related accidents are one of the primary causes of fatalities on Queensland farms; nearly half of all tractor-related deaths are caused by rollovers.

According to OIR data, there have been seven fatalities related to the operation of tractors in Queensland in the last five years. This is 26 per cent of all agricultural industry fatalities in that time period.

Rollover protective structures (ROPS) are designed and constructed to provide a zone of protection for the operator and reduce the risk of death or injury to the operator in the event of a rollover. ROPS on tractors have been effective in preventing or minimising the risk of death or serious injury.

Other tractor safety features which should be included at the design, manufacture and operation stage include:

- falling object protective structure (FOPS)
- guards e.g. for a power take-off (PTO)
- ergonomic operator controls
- safe access platforms
- protection from noise, vibration and sun exposure
- other measures for operator health and safety (e.g. seat belts).

Tractors can also be fitted with a variety of attachments and implements with each introducing a new set of hazards, even if the tractor itself is set up for safe use.

The WHS Regulation includes specific provisions for ROPS. The Code reflects the requirements in the WHS Regulation.

In addition to the content in the Code, the *Safe design and operation of tractors Code of Practice 2005* outlines more detailed information on ROPS and other relevant risk control measures.

Quad bikes and side-by-side vehicles

Quad bikes (also known as all-terrain vehicles - ATVs) and side-by-side vehicles (SSVs) are commonly used in farms and rural workplaces across Queensland. Each year, on average, more than 10 Queenslanders are hospitalised as a result of a quad bike related incident. In the last year, there were four quad bike related fatalities notified to OIR.

In Queensland, quad bikes and SSVs used for work are regulated under the WHS Act and WHS Regulation as plant. This includes duties on a person conducting a business or undertaking (PCBU) to make sure quad bikes and SSVs are safe to use, and that workers are properly trained in safe operating practices. Quad bikes and SSVs are also subject to the same safety requirements for powered mobile plant as tractors, harvesters and other farm vehicles.

In 2015, the Deputy State Coroner released findings from the inquest of nine people who died as a result of quad bike use in Queensland. The Coroner considered key safety concerns for quad bikes and SSVs, including training, helmets, passenger safety and operator protective device (OPDs).

In response to the Deputy State Coroner's recommendations to the Queensland Government, the *Statewide Plan for Improving Quad Bike Safety in Queensland 2016–2019* has delivered significant changes in the safety standards and culture for quad bikes and SSVs across the state. Changes included:

- mandatory helmet use on roads and road-related areas
- a ban on the carriage of a passenger younger than eight years of age, as well as any child regardless of age whose feet cannot reach the footrests or floor, or whose hands cannot reach any handrail provided.

The Office of Industrial Relations is exploring amending the WHS Regulation to deliver additional safety requirements for quad bike and SSV operation.

At the national level, the introduction of the *Consumer Goods (Quad Bikes) Safety Standard 2019* has led to significant additional requirements on the design and sale of all quad bikes (including additional specific requirements for utility, work or agricultural models). It does not apply to second-hand quad bikes other than to second-hand quad bikes that are imported into Australia.

Phase one of the safety standard commenced on 11 October 2020 and requires that all new and imported second-hand quad bikes must:

- meet the requirements specified in the United States or European standard for quad bikes
- have a durable label that is clear and visible when being used that warns of the risk of rollover
- have information on rollover risk in the owner's manual or instruction handbook
- be tested for lateral static stability and display the result on a hang tag.

Phase two of the safety standard commenced 11 October 2021 and will require all new and imported second-hand general use quad bikes to:

- have an operator protection device integrated into their design, or fitted to them
- meet minimum requirements for stability.

The reviewed Code will need to consider any potential updated safety requirements for quad bikes and SSVs and provide additional guidance for duty holders on what it means to meet these requirements and ensure the safe operation and use of these vehicles.

Technological advancements

The agriculture sector and other rural businesses have adopted a wide range of technological advancements since 2004, which are rapidly transforming the nature of many rural workplaces and work practices.

Innovations in the sector, often referred to as AgTech, range from those with minimal if any associated risks (such as data collection and sharing using sensor technology— the Internet of Things, or IoT) to those which raise potential workplace hazards that must be managed by duty holders. These include:

- increased use of robotics and automation
- use of unmanned aerial vehicles (UAVs, or drones) for tasks such as remote sensing and surveying, mapping, crop spraying and planting seeds.

A number of these new technologies have existing regulatory requirements related to their use in the workplace that are not administered by Workplace Health and Safety Queensland (WHSQ). For example, operator accreditation or licence is required to fly a drone for work use. However, the Code may be an appropriate document to advise duty holders of other regulatory requirements that are required to ensure the health and safety of workers.

The review of the Code will need to consider assistance for duty holders with identifying hazards and risks associated with new technologies and could provide guidance on relevant safety standards and requirements.

Electrical risks

Electrical incidents in farming and rural workplaces often involve contact between rural plant and overhead powerlines— both overhead and underground cable (electrical network). These electrical incidents resulted in fatalities, regardless of the operating voltage. In addition to death and injury, they can result in significant damage and disruption to the electrical network, public and private property and surrounding environment.

Direct contact with overhead powerlines is not necessary for an electric shock to occur. Entering the exclusion zone and having close approach to the overhead powerline conductors may allow a 'flashover' or arc to take place. The risk of flashover increases as the overhead powerline voltage increases.

In addition to contact with overhead powerlines and underground cables, electrical risks involving rural plant can include use of:

- unsafe electrical equipment or plant
- electrical equipment or plant in hazardous conditions (e.g. wet environment, hazardous atmospheres).

In Queensland, electrical safety in rural industry is regulated by the *Electrical Safety Act 2002* and the Electrical Safety Regulation 2013, which are administered by the Electrical Safety Office. The Code currently refers duty holders to the duties under the *Electrical Safety Act 2002* and the Electrical Safety Regulation 2013, as well as the following relevant electrical safety codes of practice:

- *Electrical Safety Code of Practice - Managing electrical risks in the workplace*
- *Electrical Safety Code of Practice - Electrical equipment rural industry*
- *Electrical Safety Code of Practice - Working near overhead and underground electrical lines*

The review of the Code will need to consider whether electrical risks relating to rural plant are addressed appropriately in the Code and whether updates are required.

Isolation and fatigue

Operation of plant in rural settings can often be in isolation, meaning one person is undertaking work at a distance from other workers. PCBUs have a primary duty of care to ensure the health and safety of workers while the workers are at work in the business or undertaking. For a worker operating plant in isolation, this means a PCBU should consider access to bathroom facilities, food and water and a method of communication with the PCBU and/or other workers at the property.

Operation of rural plant in agricultural settings has the potential for work strain, or chronic overwork from work intensification— this inherently increases fatigue-related risks. Fatigue is a state of mental or physical exhaustion which reduces a person's ability to perform work safely and effectively. Fatigue is a condition that can result from excessive work, inadequate or disturbed sleep, physical exertion, mental exertion, or prolonged waking times. PCBUs have a primary duty of care to identify and control fatigue-related risks.

In the context of this Code, fatigue-related risks can be caused by factors that may be work related, non-work related or a combination of both and can build up over time. Fatigue impacts alertness, which may lead to mistakes and an increase in incidents and injuries, particularly when operating fixed or mobile plant, including driving vehicles.

The current Code does not specifically address the risks of isolation and fatigue in relation to the operation of rural plant.

Invitation for feedback

OIR invites written submissions from all interested parties and members of the community on the Issues Paper.

Stakeholders may respond to (but are not limited by) the following questions, related to each of the issues highlighted above:

1. It is anticipated that the sections in the Code relating to ROPS and FOPS may require updates. What are the changes in industry practice that ROPS and FOPS guidance need to address in the Code?
2. It is anticipated that the sections in the Code relating to quad bikes and SSVs may require significant updates. How can the Code be updated to improve the safe operation of quad bikes and SSVs, and what additional guidance do duty holders need? What does best practice for training quad bike operators look like and how can this be included in the Code?
3. It is anticipated that the Code may require updates due to technological advancements in the agricultural sector and rural workplaces. What safety issues should the Code address in relation to technological advances and what additional guidance do duty holders need in the Code that relate to existing regulations on the use of new technologies i.e. drones, robotics?

4. It is anticipated that the sections in the Code relating to electrical safety may require updates. What changes should be made to the Code that would better articulate electrical safety obligations relating to rural plant? How much guidance from the existing electrical safety codes of practice should be included in the Code?
5. What changes should be made to the Code to address risks in relation to isolation and fatigue when operating rural plant?

How to make a submission

Written comments should be provided by 5pm, **Monday 29 November 2021**. All submissions received by the due date will be considered.

Responses and submissions should be sent by email to whspolicy@oir.qld.gov.au.

As this is a public consultation process, the Queensland Government is committed to openness in its considerations of public policy and therefore written comments and submissions may be published on the OIR website. Please mark clearly any comments or information you wish to be kept confidential.

For more information on the development of the Code visit worksafe.qld.gov.au.

Updates on the progress of the Code will be made quarterly through the eSAFE Rural newsletter. Visit worksafe.qld.gov.au to subscribe.