

Investigation information release

Date: December 2024

Worker exposed to risk of serious injury while refuelling petrol-powered water pump that ignited

Incident date: 25 November 2024

Event: Worker exposed to risk of serious injury while refuelling petrol-powered water pump that ignited

Location: Glenella Quarry – Cowra NSW

Overview

A worker suffered minor burns but was exposed to the risk of more serious injury when a petrol-powered water pump he was refuelling ignited.

The mine

Glenella Quarry is an open-cut quarry near Cowra in the Central West region of New South Wales. The quarry is operated by Glenella Quarry Pty Ltd and produces silica quartz pebble, clay, sand and basalt products. As part of its operations, the quarry uses crushing and screening mobile plant and equipment.

The task

A small, petrol-powered pump was used to transfer water between dams within the quarry via a 7.6 centimetre lay-flat hose. Ultimately, the water was pumped using another water pump for dust suppression while operating the screening and crushing plant.

The pump was retrofitted with a 20 litre marine-grade plastic fuel container that bypassed the pump's original equipment manufacturer (OEM) fitted fuel tank, to provide a longer run time between refuelling. Refuelling was performed using a 20 litre plastic jerry can fitted with a plastic spout to transfer fuel into the fuel container.

The incident

A worker drove to a dam in the northwest corner of the quarry to refuel a petrol-powered water pump about 2.45pm on 25 November 2024. The worker turned off the motor and, after taking a short break, began refuelling the pump using petrol in a fuel container. During this process, the

Investigation information release IIR24-11

nozzle fell out of the fuel container cap causing an uncontrolled release of petrol onto the water pump. The pump ignited, and the worker used a nearby loader to dump a bucket of crusher dust on the pump and surrounding area, extinguishing the fire. The worker suffered minor burns to his right hand. He was given first aid onsite, before returning to work later the same day.

Figure 1: The incident site covered with crusher dust



Figure 2: The fuel container used to refuel the water pump



Investigation information release IIR24-11

Figure 3: The fire-damaged water pump retrofitted with a 20 litre marine-grade plastic fuel container



The investigation

The Resources Regulator has commenced an investigation to determine the cause and circumstances of the incident that will explore, among other things, the:

- systems of work at the quarry regarding notifying incidents, refuelling plant and the safe use and storage of hazardous chemicals
- modifying, configuring, operating and maintaining the plant and equipment involved in the incident
- selecting, providing and using personal protective equipment (PPE) at the quarry, including mechanisms in place to ensure appropriate PPE for the specific work task that was worn by workers
- instruction, training, experience and supervision provided to workers relevant to the work task and the plant and equipment involved
- adequacy of risk assessments, work instructions and procedures relevant to the plant, equipment and work task involved
- adequacy of the quarry operator's safety management system including principal hazard management plans and associated control plans and procedures governing managing hazards and risks associated with refuelling plant.

The quarry operator and involved workers are assisting with the investigation. A report will be published at the conclusion of the investigation.

Investigation information release IIR24-11

Safety information

Quarry and mine operators are reminded of their duty to identify hazards and manage risks to health and safety in accordance with the provisions of the *Work Health and Safety Act 2011* and *Work Health and Safety (Mines and Petroleum Sites) Act 2013* and Regulations.

In particular, quarry and mine operators must:

- notify the Regulator immediately after becoming aware of a notifiable incident prescribed by WHS laws and arising out of the conduct of the business or undertaking
- ensure the incident site is not disturbed until the site has been attended or released by an inspector (except for action taken in accordance with s17(3) of the WHSMPS Act)
- prepare and maintain a register for all hazardous chemicals stored, handled and used at the workplace
- obtain a copy of the current safety data sheet (SDS) and ensure it is readily accessible to workers involved in storing, handling and using hazardous chemicals at the mine
- identify and manage the risks associated with hazardous chemicals such as fuel vapours and fumes, including identifying ignition sources that have the potential to ignite flammable or combustible material
- ensure the safe storage of fuel in accordance with site risk assessments and relevant SDSs, including requirements to ensure that fuel containers are stored with compatible materials in designated areas that are suitably distanced from ignition sources, protected from direct sunlight, dry, cool and well ventilated
- develop and implement safe systems of work for refuelling plant, which incorporate appropriate controls to manage the risk of ignition, including ensuring that fuel cannot make contact with hot surfaces or exhaust gases while refuelling takes place
- ensure that appropriate information, instruction, training is provided to workers in the safe systems of works for refuelling plant, with appropriate supervision to ensure compliance
- ensure that any modification to the design and configuration of plant and equipment is properly risk-assessed by a competent person, and that the additional hazards and risks to health and safety introduced by the proposed changes are considered and managed through implementing appropriate controls
- ensure that PPE is appropriate for the nature of the work task and associated hazards, with suitable information, instruction, training and supervision provided to ensure workers comply with PPE requirements.

Workers are reminded of their duty to take care for their own health and safety and that of their co-workers. They must also comply with reasonable work instructions, policies and procedures.

In particular, workers must:

- comply with site-specific procedures, hazard identification and risk management processes, governing refuelling plant and equipment and storing, handling and using hazardous chemicals
- only refuel petrol and diesel-powered plant and equipment in circumstances where fuel cannot come into contact with hot surfaces and exhaust gases

Investigation information release IIR24-11

- use and wear appropriate PPE while working within hazardous work environments, including while working with hazardous chemicals such as fuels, in accordance with site procedures and information, instruction and training provided.

Further information

Please refer to the following guidance materials:

- Code of practice: Managing risks of hazardous chemicals in the workplace (Safe Work Australia)
- Code of practice: Managing the risks of plant in the workplace (Safe Work Australia)
- AS 1940:2017 ‘The storage and handling of flammable and combustible liquids’
- AS/NZS 60079.10.1:2022 ‘Classification of areas – Explosive gas atmospheres’
- [Investigation Information Release IIR24-10 Worker suffers serious burns while refuelling petrol powered pump](#)

About this information release

The Regulator has issued this information to draw attention to the occurrence of a serious incident in the mining industry. Further information may be published as it becomes available.

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- learn more about our work on causal investigations and emergency response
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