WORK HEALTH AND SAFETY (MINES AND PETROLEUM SITES) REGULATION 2014

Registration of Powered Winding System (other than a person-riding hoist) Design Order 2020

I, Garvin Burns, Chief Inspector, with the delegated authority of the Secretary of the Department of Planning, Industry and Environment, under subclause 177(5) of the Work Health and Safety (Mines and Petroleum Sites) Regulation 2014 ("the Regulation") make the following Order.

Dated this 4th day of February 2020.

Garvin Burns
Chief Inspector
NSW Department of Planning, Industry and Environment

1. Name of Order

This Order is the *Registration of Powered Winding System (other than a person-riding hoist) Design Order 2020*.

2. Commencement

This Order commences on 1 March 2021.

3. Interpretation

drift means a mine adit or shaft, on slopes of 10 to 30 degrees, for the transport of persons and materials. This term is commonly used in coal mines.

drift winding system means a drum winding system used in a drift.

drum winding system means a winding system in which a conveyance is raised and lowered by means of a single rope attached directly to the conveyance and the rope is wound onto a cylindrical drum. A drum winding system includes a winder with two drums (double drum), each raising and lowering a conveyance.

emergency egress winding system means a winding system that is used solely for emergency egress.

friction (Koepe) winding system means a vertical shaft winding system in which conveyances are raised and lowered by means of multiple ropes passing over a driving sheave, such that the driving force is transmitted from the sheave to the ropes by friction.

person-riding hoist means a winding system used in an underground mine, that is a small gemstone mine, where the winding system lifts no more than 40 metres from the surface of the small gemstone mine to the underground workings and carries no more than two people.

Note: A person-riding hoist is subject to a separate Order made under subclause 177(5) of the Regulation.

Regulation means the Work Health and Safety (Mines and Petroleum Sites) Regulation 2014.

shaft, in underground workings, means a mine heading. A shaft may be orientated from 0 to 90 degrees.

shaft sinking winding system means a drum winding system that is used on a short term basis for the development, equipping or refurbishment of vertical shafts. A shaft sinking winding system is relocatable and is not a permanent fixture.

vertical shaft drum winding system means a drum winding system that operates in a vertical shaft.

vertical shaft winding system means a winding system that operates in a vertical shaft and includes vertical shaft drum winding systems; friction (Koepe) winding systems; shaft sinking winding systems; and emergency egress winding systems.

winding system has the same meaning as it has in clause 3 of the Regulation.

4. Revocation

The *Registration of Powered Winding System (other than a person-riding hoist) Design Order 2018* (2018 Design Order) published in the NSW Government Gazette No 119 of 9 November 2018 at pages 8458-8460, is revoked on the day this Order commences.

5. Design Requirements

5.1. Drift winding systems

(1) Except as provided in paragraph 5.1(2), all drift winding systems must be designed to meet the design requirements of the *Technical reference guide - Powered winding systems*, as identified in the following parts:

(a) Part 1 '*General requirements'* – section 3 '*Design*'
(b) Part 2 '*Drift winders'* – section 2 '*Drift winders design and construction*'
(c) Part 4 '*Ropes*' – section 2 '*Rope design and construction'*
(d) Part 5 '*Winder control systems:*
  i. section 2 '*Design – Performance requirements'*
  ii. section 3 '*Design – General control system requirements'*
  iii. section 4 *'Design – Independent safety circuit requirements'*
  iv. section 5 *'Design – Description of safety functions'*

v. section 6 *'Design – commissioning'.*

(2) Where a design does not comply, in full or part, with the parts of the *Technical Reference Guide - Powered winding systems* listed in paragraph 5.1(1) (a-d), the designer must specify the published technical standards or the engineering principles used to identify controls, in the order of the hierarchy of risk controls in Part 3.1 of the Work Health and Safety Regulation 2017, incorporated in the design to achieve at least an equivalent level of safety as the requirements of paragraph 5.1(1) (a-d).

5.2. Vertical shaft winding systems

(1) Except as provided in paragraph 5.2(2), all vertical shaft winding systems must be designed to meet the design requirements of the *Technical reference guide - Powered winding systems*, as identified in the following parts:

(a) Part 1 '*General requirements'* – section 3 '*Design*'
(b) Part 3 '*Vertical shaft winders (drum, friction, shaft sinking and emergency winders)* – section 2 '*Design and construction*'
(c) Part 4 '*Ropes*' – section 2 '*Rope design and construction'*
(d) Part 5 '*Winder control systems:*
  i. section 2 '*Design – Performance requirements'*
  ii. section 3 '*Design – General control system requirements'*
  iii. section 4 *'Design – Independent safety circuit requirements'*
  iv. section 5 *'Design – Description of safety functions'*
  v. section 6 *'Design – commissioning'.*

(2) Where a design does not comply, in full or part, with the parts of the *Technical Reference Guide - Powered winding systems* listed in paragraph 5.2(1) (a-d), the designer must specify the published technical standards or the engineering principles used to identify controls, in the order of the hierarchy of risk controls in Part 3.1 of the Work Health and Safety Regulation 2017, incorporated in the design to achieve at least an equivalent level of safety as the requirements of paragraph 5.2(1) (a-d).

6. Determination of applications for the design registration of powered winding systems made before 1 March 2021

If an application for the design registration of powered winding systems made in accordance with clause 250 of the Work Health and Safety Regulation 2017 to which the standards specified in the 2018 Design Order applies is made before the commencement of this Order, and the application has not been finally determined before that commencement, the application is to be determined as if this Order had not commenced.

Reference number:(n2020-242)