

---

## Mining and Petroleum Notices

---

Pursuant to section 136 of the *Mining Act 1992* and section 16 of the *Petroleum (Onshore) Act 1991*

NOTICE is given that the following applications have been received:

### EXPLORATION LICENCE APPLICATIONS (ELA)

ELA5757, FREEPORT-MCMORAN EXPLORATION AUSTRALIA PTY LTD, for Group 1, dated 10 December 2018.

ELA5758, CLEAN TEQ SUNRISE PTY LTD, for Group 1 and Group 2, dated 12 December 2018.

[n2018-4329]

---

NOTICE is given that the following applications for renewal have been received:

### EXPLORATION LICENCE (EL)

EL7651, LASSETER GOLD PTY LTD. Application for renewal received 5 December 2018.

### MINING LEASE (ML)

ML1435 (Act 1992), CHALLENGER MINES PTY LTD. Application for renewal received 6 November 2018.

[n2018-4330]

---

Notice is given that the following authorities have been renewed:

### EXPLORATION LICENCE (EL)

EL4573, CLEAN TEQ SUNRISE PTY LTD. Renewal effective on and from 16 October 2018.

EL6273, WHITE ROCK (MTC) PTY LTD. Renewal effective on and from 14 November 2018.

[n2018-4331]

---

Notice is given that the following authority has been cancelled:

### EXPLORATION LICENCE (EL)

EL8465, LACHLAN RESOURCES PTY LTD AND DUKE EXPLORATION PTY LTD, area of 72 units. Cancellation took effect on 6 December 2018.

[n2018-4332]

---

Notice is given that the following authority has been cancelled in part:

### EXPLORATION LICENCE (EL)

EL8652, LACHLAN RESOURCES PTY LTD AND DUKE EXPLORATION PTY LTD

**Description of area cancelled:** An area of 52 units has been cancelled. Part cancellation took effect on 6 December 2018. The authority now embraces an area of 10 units.

[n2018-4333]

---

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

### Registration of Canopies on Continuous Miners Design Order 2018

I, Leigh Nicholls, Chief Inspector, with the delegated authority of the Secretary, Department of Planning and Environment, in pursuance of clause 177(5) of the *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014* make the following Order.

Dated this 18th day of December 2018.

Leigh Nicholls  
Chief Inspector  
NSW Department of Planning and Environment (by delegation)

#### 1. Name of Order

This Order is the Registration of Canopies on Continuous Miners Design Order 2018.

## 2. Commencement

This Order commences on 21 December 2018.

## 3. Interpretation

In this Order:

*AS* is a reference to Australian Standards.

*AS/NZS* is a reference to Australian/New Zealand Standards.

*canopy roof* means the plate-work and any associated bracing commonly utilised to provide protection above the driver's enclosure.

*lateral* means the side edge of the canopy roof, usually located at 90 degrees to the centreline running from the head to the tail of the continuous miner.

*longitudinal* means the lengthways edge of the canopy roof, usually located parallel to the centreline.

*support* includes the support legs and any associated steel work, other than the canopy roof, which interconnects the support legs.

*support leg* means the vertical or near vertical member connecting the continuous miner chassis or driver's enclosure to the canopy roof.

## 4. Revocation

The *Registration of Canopies on Continuous Miners Design Order 2015* published in the NSW Government Gazette No 52 of 26 June 2015 at page 1846 is revoked.

## 5. Design requirements

5.1 Except as provided in paragraph 5.8, all canopies on continuous miners used in underground coal mines must be designed to meet the design requirements of paragraphs 5.2, 5.4-5.7

### 5.2 General

- (1) All canopies on continuous miners used in underground coal mines must be designed and tested in accordance with this Order.
- (2) Without limiting 5.2 (1), all canopies on continuous miners used in underground coal mines must be designed in accordance with the relevant parts of the following standards, as amended from time to time:
  - (a) AS/NZS 1554.1:2014 *Structural steel welding – Welding of steel structures*
  - (b) AS 3990-1993 *Mechanical equipment – Steelwork*
  - (c) AS 4100-1998 *Steel structures*.

### 5.3 Notes (informative)

- (1) In the event of the canopy being subjected to a fall of roof which exceeds the elastic limit of the canopy design, then the canopy should be designed such that the yielding should be progressive and limited to the extent that the driver can safely remain within the operator compartment i.e. 1000mm minimum headroom space remains between the seat and canopy roof. Consideration should be given to suspending the driver's seat from the underside of the canopy roof.
- (2) The canopy design should consider access into the operator compartment and the driver's visibility in all directions, particularly to the driver's front and rear and as far as is reasonably practicable, to the sides.
- (3) The design of the canopy roof and seat should consider that when the driver leans slightly to the right, as is customary by many drivers, the driver's head remains underneath the canopy roof.

### 5.4 Canopy Design

- (1) The canopy roof should be attached to the support legs by either bolted or welded-connections.
- (2) The base of the canopy support legs must be securely bolted or welded to the main frame of the continuous miner or driver enclosure.
- (3) The canopy roof must be designed by utilising a substantial one-piece solid plate devoid of uneven structural protrusions above the roof line (including cable support structures).

## 5.5 Design Loads

- (1) The protective canopy must be designed to have a minimum structural capacity to support elastically a static uniform load of 8.2 tonnes or a force equivalent to a static load of 105 kilopascals distributed uniformly over the greatest plan view area of the canopy roof.
- (2) The protective canopy must be designed to have a minimum structural capacity to support elastically a static uniform load of 2 tonnes applied horizontally to the edge of the canopy roof. The horizontal loading must be applied in both the longitudinal and lateral directions separately.
- (3) Larger test loads should be considered by the applicant where appropriate for conditions where canopy is to be used.

## 5.6 Materials

All main load-bearing components used in the construction of protective canopies must be in accordance with AS 4100-1998 or AS 3990-1993.

## 5.7 Welding

All welding must comply with Category SP welds as set out in AS/NZS 1554.1:2014.

5.8 Where a design does not comply, in full or part, with the requirements listed in paragraphs 5.2, 5.4-5.7, 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 paragraphs 5.2, 5.4-5.7.

## 6. Testing requirements

### 6.1 Loading method

- (1) When testing in the vertical plane, an acceptable method of test provides for the test load to be distributed within the middle ninth of the roof's plan view area.
- (2) When testing in the horizontal plane, an acceptable method of test provides for the test load to be distributed along the middle third of the longitudinal and middle third of the lateral edge of the roof separately.

### 6.2 Test Method

- (1) All testing must be carried out with the canopy fully extended, unless stated otherwise.
- (2) A dial indicator or other suitable measuring instrument with an accuracy of 0.01 of a millimetre shall be used for measurement of the maximum deflection and the residual deflection, caused by the application of the test load. The dial indicator or other suitable measuring instrument shall have a current calibration certificate at time of use issued by:
  - (a) a laboratory in Australia that is accredited by the National Association of Testing Authorities Australia (NATA) for performing the test; or
  - (b) where a NATA-accredited laboratory is not available, a suitably qualified and experienced independent facility having regard to test equipment, equipment calibration, quality processes, work methods, past test experience and independent technical verification should be used.
- (3) Apply vertical test load (per 5.5 (1)) to middle ninth plan view area i.e. to one third span of width and length:
  - (a) For fixed type canopy apply preload of between 300–500 kg to remove slack from joints, set dial indicator or other suitable measuring instrument as per 6.2 (2) to zero then apply test load. Record deflection “A” under the test load and the residual deflection “B” on removal of the test load. “B” divided by “A” gives the residual deflection to maximum deflection ratio.

**Note:** It may be necessary to repeat this test or other tests in order to further eliminate any initial movement in pinned or bolted connections.
  - (b) For canopies initially supported by hydraulic cylinders, measure pressure and load at hydraulic cylinders when the full test load is applied, then increase test load until the cylinders yield, record yield pressure and load. Ensure that pressure relief system reseats when load is reduced i.e. reload a second time.
  - (c) If the yield testing of the hydraulics requires a load which is beyond the elastic limit of the canopy then separate bench testing of the hydraulics may be required.
  - (d) With canopy lowered to its minimum height and oil removed from the support cylinders i.e. canopy resting on its mechanical stops apply test load as per 6.2 (3) (a).

**Note:** This test is only applicable for canopies with hydraulic height adjustment where the support cylinders are required to elastically support the test load without pressure relief occurring.

- (4) Re-extend canopy to maximum height and apply horizontal test load (per 5.5 (2)) along the middle one third of the canopy edge directing the load away from the centreline of the machine. Apply the preload and record deflection measurements as in 6.2 (3) (a).
- (5) Repeat test 4 (per 6.2 (4) but with the load applied towards the centreline of the machine. This test is only necessary if there is a significant difference in the strength of the canopy supports between the two directions. Apply the preload and record deflection measurements as in 6.2 (3) (a).
- (6) Apply horizontal test load along the middle one third of the canopy edge directing the load from the rear to the front of the machine. Apply the preload and record deflection measurements as in 6.2 (3) (a).
- (7) For canopies fitted with rear hydraulic cylinders, the cylinder must not be the component that stops any upward movement that may occur i.e. a mechanical stop should prevent over extension of the canopy.
- (8) Repeat test 6 (per 6.2 (6) but with the load applied directed from the front to the back of the machine. This test is only necessary if there is a significant difference in the strength of the canopy supports between the two directions. Apply the preload and record deflection measurements as in 6.2 (3) (a).

## 7. Performance standards

7.1 Except as provided in paragraph 7.4, all canopies on continuous miners used in underground coal mines must be designed to meet the performance requirements of paragraphs 7.2-7.3

### 7.2 Canopy performance

When tested in accordance with the test method in 6.2, the residual deflection “B” must be less than 10% of the maximum deflection “A” measured with the load applied. That is:  $(B/A) \times 100\%$  is less than 10%.

### 7.3 Welded joints

All welded joints must be non-destructively examined in accordance with AS/NZS 1554.1:2014.

7.4 Where a design does not comply, in full or part, with the performance requirements of paragraphs 7.2-7.3, 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 paragraphs 7.2-7.3.

[n2018-4334]

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

### Registration of Braking Systems on Plant Used in Underground Coal Mine Transport Design Order 2018

I, Leigh Nicholls, Chief Inspector, with the delegated authority of the Secretary, Department of Planning and Environment, in pursuance of clause 177(5) of the *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014* (“the Regulation”) make the following Order.

Dated this 14th day of December 2018.

Leigh  
Chief  
NSW Department of Planning and Environment (by delegation)

Nicholls  
Inspector

### 1. Name of Order

This Order is the *Registration of Braking Systems on Plant Used in Underground Coal Mine Transport Design Order 2018*.

### 2. Commencement

This Order commences on 21 December 2018.