



Queensland

Coal Mining Safety and Health (Methane Monitoring and Ventilation Systems) Amendment Regulation 2019

Subordinate Legislation 2019 No. 250

made under the

Coal Mining Safety and Health Act 1999

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1 Short title

This regulation may be cited as the *Coal Mining Safety and Health (Methane Monitoring and Ventilation Systems) Amendment Regulation 2019*.

2 Commencement

This regulation commences on 6 January 2020.

3 Regulation amended

This regulation amends the *Coal Mining Safety and Health Regulation 2017*.

4 Amendment of s 6A (Potential hazard guide—coal seam gas or petroleum)

Section 6A(3)(b), ‘that’—
omit.

5 Amendment of s 120 (Abnormal circumstances declaration)

Section 120(2)(b), after ‘if it’—
insert—
is

6 Insertion of new s 234A

After section 234—
insert—

234A Armoured face conveyor

- (1) An armoured face conveyor must be fitted with at least 1 automatic methane detector on each electrically-powered tailgate drive motor to detect the general body concentration of methane at the tailgate drive motor.

- (2) The detector must automatically—
- (a) activate a visible alarm to warn the operator when the concentration exceeds 1%; and
 - (b) trip the electricity supply to the armoured face conveyor and the longwall shearer when the concentration exceeds 2%.

Note—

See section 393.

7 Amendment of s 241 (Places where methane detectors must be located)

Section 241, ‘automatic’—

omit.

8 Amendment of s 242 (Intake airways)

- (1) Section 242—

insert—

- (4A) At least 1 methane detector must be located in each intake airway at the interface between 2 ERZ1s.
- (4B) A detector located at the interface between 2 ERZ1s must automatically activate a visible alarm when the general body concentration of methane detected at the interface exceeds 1%.

Note—

See section 396.

- (2) Section 242(5), ‘subsections (2)(a) and (4)(a)’—

omit, insert—

subsection (2)(a), (4)(a) or (6)

- (3) Section 242(4A) to (5)—

renumber as section 242(5) to (7).

9 Amendment of s 243 (Main return airway and return airway in a ventilation split)

Section 243(1), ‘automatic’—

omit.

10 Replacement of s 244 (Longwall face)

Section 244—

omit, insert—

243A Return airway in ventilation split intersecting with longwall face

- (1) This section applies—
 - (a) in relation to a return airway in a ventilation split that intersects with a longwall face; and
 - (b) in addition to the requirements under section 243.
- (2) At least 1 automatic methane detector must be located in the return airway within 400m of the intersection with the longwall face.
- (3) The detector must automatically—
 - (a) activate a visible alarm when the general body concentration of methane detected in the return air exceeds the percentage stated in the mine’s principal hazard management plan for ventilation as the percentage that must not be exceeded before the detector activates the alarm; and
 - (b) trip the electricity supply to the armoured face conveyor and the longwall shearer cutters when the general body concentration of methane detected in the return air exceeds 2%.

Note—

See section 393.

243B Return airway that is a relevant zone

- (1) This section applies in addition to the requirements under section 243.
- (2) At least 1 methane detector must be located in each of the following places—
 - (a) a return airway that is an ERZ0 (a *relevant zone*), if a machine can physically pass through a boundary between—
 - (i) a NERZ and the ERZ0; or
 - (ii) an ERZ1 and the ERZ0;
 - (b) a return airway that is an ERZ1 (also a *relevant zone*), if a machine can physically pass through a boundary between—
 - (i) a NERZ and the ERZ1; or
 - (ii) another ERZ1 and the ERZ1.
- (3) The detector must automatically activate a visible alarm at each machine access leading into the relevant zone when the general body concentration of methane detected in the return air exceeds 1%.

Note—

See section 396.

244 Longwall face

- (1) At least 1 automatic methane detector must be located at the intersection between a longwall face and an intake airway.
- (2) A detector located at the intersection between a longwall face and an intake airway must automatically—
 - (a) activate a visible alarm when the general body concentration of methane detected at the intersection exceeds 1%; and

- (b) trip the electricity supply to longwall equipment in the longwall face and intake airway when the general body concentration of methane detected at the intersection exceeds 2%.

Note—

See section 394.

11 Amendment of s 250 (Action to be taken if methane detector activates or is non-operational)

- (1) Section 250(1)(a), after ‘234,’—

insert—

234A,

- (2) Section 250(1)(c), from ‘located’ to ‘NERZs’—

omit, insert—

located as required under section 242, 243, 243A, 243B or 244

- (3) Section 250(2), ‘to a machine or vehicle (other than a longwall shearer)’—

omit, insert—

in relation to a methane detector fitted to a machine or vehicle (other than a longwall shearer or armoured face conveyor)

- (4) Section 250(3), ‘to a longwall shearer’—

omit, insert—

in relation to a methane detector fitted to a longwall shearer as mentioned in section 234

- (5) Section 250(3), ‘the machine’—

omit, insert—

the longwall shearer

- (6) Section 250(4)—

omit, insert—

- (4) The procedure may also provide that, if an event mentioned in subsection (1)(b) happens in relation to a methane detector fitted to a relevant machine or relevant vehicle (other than an armoured face conveyor) being used in a NERZ, the operator may continue to use the machine or vehicle only if—
 - (a) the general body concentration of methane around the machine or vehicle is less than 0.5%; and
 - (b) the place where the machine or vehicle is located is continuously monitored by a person using a portable methane detector.
- (4A) The procedure may also provide that, if an event mentioned in subsection (1)(c) happens in relation to a methane detector located as required under section 243, 243A or 244, the methane detector must be replaced or repaired immediately.
- (4B) The procedure may also provide that, if an event mentioned in subsection (1)(c) happens in relation to a methane detector located as required under section 242 or 243B—
 - (a) the methane detector must be replaced or repaired as soon as practicable; and
 - (b) for a methane detector located in an intake airway at the interface between the zones as mentioned in section 242(1)(a) or (b)—the methane detector may be overridden temporarily to allow operations to continue in the zones until the detector is replaced or repaired, but only if the conditions mentioned in subsection (7) are complied with.
- (7) Section 250(5), ‘subsection (4)(b)(ii)’—
omit, insert—
subsection (6)(b)

- (8) Section 250(4A) to (6)—
renumber as section 250(5) to (8).

12 Replacement of s 251 (Record of tripping of electricity supply)

Section 251—

omit, insert—

251 Record of tripping of electricity supply

- (1) The underground mine manager for a mine must ensure a record is kept of the day and time when an electrical supply is tripped by a methane detector used, fitted or located as required under any of sections 231, 233 to 240, 242, 243A, or 244.
- (2) The record must be kept for 7 years after the day the electrical supply is tripped.

Note—

See sections 394 and 396.

13 Amendment of s 279 (Safety factors for winder and slope haulage ropes)

Section 279, '(1)'—

omit.

14 Amendment of s 290 (Signposting of ERZ boundaries)

- (1) Section 290(1)(b)—

omit, insert—

- (b) 2 ERZ1s; or
(c) a NERZ and an ERZ0; or
(d) an ERZ1 and an ERZ0.

- (2) Section 290(2)(b), 'the ERZ0'—

omit, insert—

either of the ERZ1s

(3) Section 290(2)—

insert—

(c) for a boundary mentioned in subsection (1)(c) or (d)—the ERZ0.

(4) Section 290(3)(a), example—

omit.

15 Amendment of s 343 (Ventilation system must provide for general body concentrations for particular contaminants and gases)

(1) Section 343(1)(a)—

omit, insert—

(a) for a contaminant mentioned in schedule 6, column 1—as low as reasonably achievable and within the limits to which a person is allowed to be exposed under section 359; and

(2) Section 343(1)(b), ‘; or’—

omit, insert—

; and

(3) Section 343(1)—

insert—

(d) for carbon dioxide—as low as reasonably achievable and within the limits to which a person is allowed to be exposed under section 360.

(4) Section 343(2) and (3)—

omit, insert—

(2) The ventilation officer must ensure—

- (a) a record is made of the results of monitoring the ventilation system under subsection (1) for the atmospheric contaminants and gases mentioned in the subsection; and
 - (b) the record is kept for 7 years after it is made.
- (3) The ventilation officer must also ensure that, if the general body concentration of methane in the mine exceeds 2.5% (a *methane event*)—
- (a) a record is made of—
 - (i) the day, time and duration of the methane event; and
 - (ii) the part of the mine in which the methane event happened; and
 - (b) the record is kept for 7 years after the day the methane event happened.
- (4) This section does not apply to a part of the mine exempted under section 345.

16 Amendment of s 344 (Other things for which ventilation system must provide)

- (1) Section 344(1)(b)(i)—
omit, insert—
- (i) in each place used by a person for normal work or normal travel; and
- (2) Section 344(1)(b)(iii), after ‘ERZ1’—
insert—
- or an ERZ0
- (3) Section 344(2), example—
omit.
- (4) Section 344(3)—
omit, insert—
- (3) Subsection (1)(b)(i) does not apply to the

following places—

- (a) a place where controlled ventilation has failed and that is being inspected under section 307 to re-establish controlled ventilation;
- (b) a cut-through connected to a roadway, if—
 - (i) control measures, other than controlled ventilation, have been implemented for minimising, within acceptable limits, the layering and accumulation of noxious and flammable gas in the cut-through; and
 - (ii) there is controlled ventilation on the roadway.

(5) Section 344—

insert—

(6) In this section—

controlled ventilation, for a place, means ventilation involving a ventilation current of an average velocity of at least 0.3m/s, measured across the cross-sectional area of the roadway in the place.

17 Amendment of s 345 (Parts of mine exempted from ventilation requirement)

(1) Section 345(b) and (c)—

omit, insert—

(b) a goaf area;

(2) Section 345(d)—

renumber as section 345(c).

18 Insertion of new ch 6, pt 4

Chapter 6—

insert—

Part 4

Transitional provisions for Coal Mining Safety and Health (Methane Monitoring and Ventilation Systems) Amendment Regulation 2019

392 Definitions for part

In this part—

amending regulation means the *Coal Mining Safety and Health (Methane Monitoring and Ventilation Systems) Amendment Regulation 2019*.

previous, in relation to a provision, means the provision as in force immediately before the commencement.

393 Deferral of particular provisions for 1 month

The following provisions do not apply until the end of 1 month after the commencement—

- (a) section 234A;
- (b) section 243A;
- (c) section 250(1)(a) and (b), to the extent it relates to an automatic methane detector fitted to an armoured face conveyor as required under section 234A;
- (d) section 250(1)(c) and (5), to the extent it relates to a methane detector located as required under section 243, 243A or 244;

- (e) section 343(2), to the extent it relates to a record for monitoring a ventilation system under section 343(1) for oxygen, methane or carbon dioxide;
- (f) section 343(3).

394 Continuation of particular previous provisions for 1 month

- (1) Previous sections 244 and 251 continue to apply as if the amending regulation had not been made.
- (2) This section stops applying at the end of 1 month after the commencement.

395 Continuation of particular previous provision for 3 months

- (1) Previous section 290 continues to apply as if the amending regulation had not been made.
- (2) This section stops applying at the end of 3 months after the commencement.

396 Deferral of particular provisions for 6 months

The following provisions do not apply until the end of 6 months after the commencement—

- (a) section 242(5) and (6);
- (b) section 242(7), to the extent it relates to an alarm mentioned in section 242(6);
- (c) section 243B;
- (d) section 250(1)(c) and (6), to the extent it relates to a methane detector located as required under section 242(5) or 243B;
- (e) section 251, to the extent it relates to a methane detector located as required under section 242(5) or 243B;

- (f) section 344(1)(b)(iii), to the extent it relates to a working place in an ERZ0.

397 Continuation of particular previous provisions for 6 months

- (1) Previous section 345(b) and (c) continues to apply as if the amending regulation had not been made.
- (2) This section stops applying at the end of 6 months after the commencement.

19 Amendment of sch 9 (Dictionary)

- (1) Schedule 9, definitions *automatic methane detector* and *general body concentration*—

omit.

- (2) Schedule 9—

insert—

automatic methane detector means a methane detector that automatically—

- (a) activates a visible alarm when the methane concentration in the atmosphere exceeds a particular level; and
- (b) trips the electricity supply when the methane concentration in the atmosphere exceeds a particular level.

general body concentration, for a gas or an atmospheric contaminant in an underground mine or part of an underground mine, means the concentration of the gas or contaminant measured at a representative location in the mine or part.

ENDNOTES

- 1 Made by the Governor in Council on 12 December 2019.
- 2 Notified on the Queensland legislation website on 13 December 2019.
- 3 The administering agency is the Department of Natural Resources, Mines and Energy.

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