

**Model Work Health and Safety Regulations for Mining - Public Comment Response Form**

<b>Individual/Organisational name: Australian Institute of Mine Surveyors Ltd</b>	
<b>Regulations Chapter 9: Mines</b>	
<b>Part 9.2</b>	
<b>Regulation</b>	<b>Comment</b>
9.2.29 Ventilation plans for underground mines	<p>The following points need to reflect the requirements under the Code of Practice for Mine Surveyors supplied originally by Australian Institute of Mine Surveyors.</p> <ul style="list-style-type: none"> <li>(1) The mine operator of an underground mine must ensure that a plan of the ventilation system for the mine is prepared.</li> <li>(2) The ventilation plan must show: <ul style="list-style-type: none"> <li>(a) the direction, course and volume of air currents; and</li> <li>(b) the position of all air doors, stoppings, fans, regulators and other ventilating plant and structures at the mine.</li> </ul> </li> <li>(3) The mine operator must ensure that a copy of the ventilation plan is available for inspection under the Act.</li> </ul>
<b>Part 9.5</b>	
<b>Regulation</b>	<b>Comment</b>
9.5.1 Survey plan of mine must be prepared	<p>This does not reflect the requirements of states within Australia. Both positions must be registered, authorised or endorsed mine surveyors with the required level of registration for all mines or open cut only.</p> <p><i>(1) The mine operator of a mine must ensure that an accurate and detailed survey plan of the mine is prepared by:</i></p> <ul style="list-style-type: none"> <li><i>(a) in the case of an underground coal mine or an underground metalliferous mine, [a registered mine surveyor]; or</i></li> <li><i>(b) in any other case, a registered surveyor with open cut only endorsement/authorisation/registration.</i></li> </ul>
	<p>The following points need to reflect the requirements under the Code of Practice for Mine Surveyors supplied originally by Australian Institute of Mine Surveyors.</p> <ul style="list-style-type: none"> <li>(2) <i>The plan must reference the mine to the Geocentric Datum of Australia and the Australian Height Datum.</i></li> <li>(3) <i>The plan must clearly show the following:</i> <ul style="list-style-type: none"> <li>(a) <i>the workings of the mine, including disused workings and bore holes;</i></li> </ul> </li> </ul>

- (b) *the location of electrical installations;*
- (c) *the location of telephones and other fixed plant associated with the radio and telecommunications systems; Not necessary for future plans to reference these as historical mine workings plans are used for locality/hazard identification and most often this plant is removed before closure. It is irrelevant and should be identified on another plan.*
- (d) *water dams and tailings dams;*
- (e) *natural features surrounding the mine;*
- (f) *places where hydrocarbons or explosives are stored; Not necessary for future plans to reference these as historical mine workings plans are used for locality/hazard identification and most often this plant is removed before closure. It is irrelevant and should be identified on another plan.*
- (g) *points of entry and exit, including emergency exits;*
- (h) *refuges (in an underground mine).*

**Note**

*Regulation 9.2.29 requires the mine operator of an underground mine to prepare a plan of the ventilation system for the mine.*

**Part 9.5**

<b>Regulation</b>	<b>Comment</b>
9.5.2 <i>Review of survey plan</i>	<p>The following points need to reflect the requirements under the Code of Practice for Mine Surveyors supplied originally by Australian Institute of Mine Surveyors.</p> <p><i>The mine operator of a mine must review and, if necessary, revise the mine survey plan:</i></p> <ul style="list-style-type: none"> <li>(a) <i>when there has been a significant mine modification; and</i></li> <li>(b) <i>at least every 3 months in relation to the parts of the plan that identify points of access, exits and refuges; and</i></li> <li>(c) <i>otherwise at least annually.</i></li> </ul>

**Part 9.5**

<b>Regulation</b>	<b>Comment</b>
9.5.3 <i>Survey plan to be available for inspection</i>	<p>The following points need to reflect the requirements under the Code of Practice for Mine Surveyors.</p> <p>(1) <i>The mine operator of a mine must keep the current mine survey plan and all previous versions of the plan available for inspection under the Act.</i></p>

(2) *The mine operator of a mine must make the plan readily accessible on request to workers at the mine.*

#### Other Comments

**The plans must be submitted to each state regulatory body (annually as a minimum) and for that body to be the custodian of all mine survey records and plans for future reference. This has to happen or information may go missing or be destroyed.**

#### Codes of Practice

##### Inundation and Inrush Hazard Management

Section/page number	Comment
Page 16	<p>Any drilling strategy or other method for confirming barrier size should also be designed to detect major survey errors in plans of old workings or the presence of unrecorded workings.</p> <p>Should read:  <i>Any drilling strategy or other method for confirming barrier size should also be designed to detect major errors in plans of old workings or the presence of unrecorded workings.</i></p> <p>Errors can be a result of any number of issues one of which may be survey related.</p>

##### Survey and Drafting Directions for Mine Surveyors

Section/page number	Comment
1.4 Inspection	<p>The plans must be submitted to the relative regulatory body, either hard copy or digitally for storage and held as record for future reference.</p> <p><i>The mine operator must keep the mine survey plan available for inspection under the Act. It must also be readily accessible on request to workers at the mine.</i></p>
Section/page number	Comment

<b>2.5 Survey Records and Supply of Survey Information</b>	<p><b>Upon abandonment of the mine all survey records should be submitted to the regulatory body for retention. And.....</b></p> <p><i>Upon Discontinuance of a mine all Survey Records relevant to the preparation of the Mine Workings Plan should be prepared by the Mine surveyor for submission to the regulatory body for retention.</i></p>
<b>Section/page number</b>	<b>Comment</b>
<b>3.1 Preparing the Mine Workings Plan</b>	<p><b>This plan must be prepared for submission to the regulatory body as required after the commencement of mining operations and continue to do so on an annual basis.</b></p> <p><i>The Mine Workings Plan should be prepared by or under the supervision of the Mine surveyor.</i></p>
<b>Section/page number</b>	<b>Comment</b>

**3.6 Information to be shown on the Mine Workings Plan**

**This information needs to be the same as in the regulations or removed from the regulations and placed under the Mine Surveying Code of Practice. No duplication is required if you reference the Mine Surveying COP. Look at original document submitted by AIMS.**

*The WHS Regulations require that the mine plan show*

- *the workings of the mine, including disused workings and incorrectly located bores*
- *the ventilation system, including all ventilation fans*
- *the location of electrical installations associated with the distribution of electricity at the mine*
- *the location of telephones and other fixed plant associated with the radio and telecommunications systems*
- *water dams and tailings dams*
- *natural features surrounding the mine*
- *places where hydrocarbons or explosives are stored, and*
- *points of access and egress, including emergency exits.*

*General information for both underground and open cut mines*

- *Adjacent mine workings - an outline of all workings in any direction within 100 metres of the current mine being worked.*
- *Barriers and restricted zones.*
- *Borehole locations:*
  - *Where it is not practical to show all Boreholes on the Level Workings sheet, a separate "Borehole Plan", which should become part of the Mine Workings Plan, should be produced as an overlay.*
  - *A reference on the Level Workings Sheet is required to indicate the existence of any Borehole Plan sheet.*
  - *All Boreholes should be identified as to type and name.*
  - *Any borehole removed by the mining process or is in the void is not required to be shown. Remnant stubs of these holes that may present a hazard to future mining operations should be shown.*
- *Cadastral Parcels.*
- *MGA Grid Lines.*
- *Mining Approvals/ Acceptances (if applicable from State prescribed legislation).*
- *Mining lease boundaries.*
- *Potential sources of Inrush to be shown (outlined in green).*
- *State regulated dams*
- *Survey control stations including bench marks.*
- *Surveyed geological features - all known outcrops, subcrops, faults, dykes, cinder belts, and other significant dislocations, as surveyed.*
- *Mine operation boundaries.*

Section/page number	Comment
3.10  Certification	<p><b>Needs to be identified in the certification that the surveyor has followed this code.</b></p> <p><i>Unless prescribed by State legislation, the following certification should be utilised.</i></p> <ul style="list-style-type: none"> <li>• <i>The hard copy of the Mine Workings Plan should be certified (signing and dating) by the Mine surveyor in the certification of accuracy schedule; after the most recent Reporting Period has been charted.</i></li> <li>• <i>The Mine surveyor by signing and dating the certification of accuracy schedule declares:</i> <ul style="list-style-type: none"> <li>○ <i>the Mine Workings Plan has been prepared ; and</i></li> <li>○ <i>the surveys shown on the Mine Workings Plan have been completed to an accuracy.</i></li> </ul> </li> </ul>
Section/page number	Comment
6.1 Supply Period	<p>More rules are required to detail the supply of mine data to regulatory bodies. It has been noted that moving towards electronic data is readily available to more people and as such a change in reporting and acceptance of such data by the regulatory bodies is required. This supply needs to be on a regular basis to ensure that a set of data is supplied and retained by government agencies for their own and others' use.</p> <p><i>Where required the mine surveyor should supply to the regulator, in the specified time, copies of mine working plans and digital data.</i></p>
Section/page number	Comment
7.12 Declaration	<p>Should read:</p> <p><b>A plan referred to in Section 7 of this code should have an appropriate area on the plan allocated for certification by the mine manager (or equivalent statutory position) and the Mine surveyor. Certification should indicate the origin of the information and that the information shown on the plan is truly represented.</b></p>
Section/page number	Comment
Page 32	Remove empty table.
Other Comments	

Inconsistencies remain throughout the document making references to the document or not. Surveyors either follow the code or none of it, they must follow the whole of the code (relating to their mine of course) but to mention some areas (5.1.2) and not others will ensure that inconsistencies will flow through to survey practices.

Areas that AIMS felt clarification was required such as surveyor's liability is required to ensure that they are aware of the responsibilities and potential liability of any future issues that may be identified from their work.

Exemptions (as identified in the original AIMS submission) are required due to the mine's life (or lack thereof) and should be identified as a need for such operating mines.

Approval for auger mining are required in some states as well as other plans (as originally detailed in AIMS submission) and with a greater focus on environmental policies then this should be noted/detailed in this code.

#### Mine Closure

Section/page number	Comment