

FACTSHEET

Mine survey plan provision of borehole data

Introduction

Under clause 127(1) of the Work Health and Safety (Mines and Petroleum Sites) Regulation 2014 (the Regulation), the operator of a mine must provide a copy of the survey plan to the NSW Resources Regulator (the Regulator) in the manner and form required as detailed by notice in a gazette¹.

The notice requires all coal mines and underground metal mines where staff work more than 10,000 hours a year (in total) to submit survey plans annually to the Regulator.

All mine survey plans required to be provided to the Regulator under the notice must be prepared in accordance with clause 122 of the Regulation, the Surveying and Spatial Information Regulation 2017, and the requirements of the *Survey and Drafting Directions for Mining Surveyors 2020 (NSW Mines)*² (the Drafting Directions).

FAQs

What borehole information is required?

Section 3.9 of the Drafting Directions a Survey of Boreholes (Page 11) requires a borehole survey and states:

"Boreholes are to be identified by a unique name or number and are to be shown on the Mine Survey Plan. Collar and/or commencement locations of boreholes are to be established from a control, subsidiary or secondary survey, with both MGA coordinates and AHD levels in accordance with these Directions. The following information will also be recorded, wherever possible, whether from direct survey or other source, i.e. driller's log, geophysical survey:

- total length (or depth)
- inclination (or declination) and
- plan projection (bearing or azimuth) when other than near vertical.

¹ https://www.resourcesregulator.nsw.gov.au/ data/assets/pdf file/0017/1221254/Mine-Survey-Plan-Order-2020-No.3.pdf

² https://www.spatial.nsw.gov.au/surveying/mining



The Nominated Mining Surveyor shall be satisfied that the holes are accurately recorded and represented on the Mine Survey Plan with regard to mine safety."

Can a separate borehole plan be provided?

Surveyors are encouraged to create a Mine Survey Plan which depicts the boreholes within the mapping area. However, where large numbers of boreholes create visibility issues, a separate borehole plan can be provided.

Section 4.3 of the Drafting Directions Preparation of Mine Survey Plan outlines the required digital themes including borehole locations (page 13). Further in the mapping area requirements (page 15) of the Digital Themes, the Drafting Directions allow for a separate Borehole Plan if required.

The Mine Working Digital Themes and sufficient detail in the form of annotation to identify the characteristics of type, name, dislocation or status should be shown together with the following detail:

The position of all boreholes within that sheet or:

- where it is not practical to show all boreholes on the seam, level or void sheets, a separate 'Borehole Plan' which shall become part of the Mine Survey Plan, shall be produced as an overlay
- a reference on the Seam, Level and Void Workings Sheet is required to indicate the existence of any Borehole Plan sheet
- all boreholes should be identified as to type and name and their current status e.g. open, sealed or capped
- where boreholes are drilled in adjacent strata, sufficient reduced levels should be shown to indicate their position
- any borehole that is removed by the mining process or is in the void, is not required to be shown.
 However, remnant stubs of these holes, which may present a hazard to future mining operations, must be shown.

Unreasonable amount of overlay sheets or where it is not practicable to depict the boreholes within the mapping area, a separate borehole plan may be provided. A separate borehole plan forms part of the Mine Survey Plan and must be certified.

In circumstances where excessive boreholes prevent map visibility or require a large number of borehole overlays, it is sufficient to refer to the location of boreholes solely in a table on the PDF of the borehole plan and not depicted within the mapping area. It is up to the surveyor to make a decision as to whether the boreholes will be drawn within the mapping area or not.



Can additional information be shown on the plan?

Section 4.3 of the Survey and Drafting Directions, states that 'any borehole that is removed by the mining process or is in the void, is not required to be shown'. It does not state that it is not permitted to be shown.

Section 4.4 of the Survey and Drafting Directions allows the inclusion of any additional information. The existing schedule of borehole co-ordinates is additional information that is permitted to be shown.

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