Appendix C: MBCM Seam Clarification

The basal seam for the mine design has been determined as the D02, due to various technical and economic factors. There are 2 seams or plies lower in the stratigraphy, namely D00 and C01; however these are inconsequential coal seams. They are not economic due to their thin nature, variability and most importantly poor quality. The ash level of the seams means they are not a minable product. They have been identified and modelled to assist in the understanding of the general structural geology of the area.

The mining layout for Horse Pit has been determined by the location of the limit of oxidation (LOX) of the lower Dysart seam. This LOX has been determined by the historic and more recent geological drilling undertaken by BMA. The LOX line has been defined by the intersection of the base of weathering and the lower Dysart coal seam. Coal above the LOX line will be weathered and have no market value. This is shown graphically below.

![Diagram of Horse Pit Box Cut](image)

*Figure 1 Typical section through the proposed Horse Pit Box Cut*

As may be seen the boxcut is planned to be located on the LOX line. As the coal dips progressively to the east and gets deeper it is not feasible or desirable to place the waste material excavated from the boxcut above coal.

As the section has shown, there is no coal to the west, and so the best location for this waste is to the west of the proposed boxcut.

Horse Pit is limited in the north by Horse Creek. In order to maximise the extraction of the coal within the current lease, the current Horse Creek will need to be realigned to a controlled area. This area has been defined to allow sufficient area for the required parameters for stream flow to be achieved and for access criteria.