

## 2. APPLICATION AREA

### 2.1. APPROVED PLAN

The **Approved Plan** for Longwalls 705 to 710 refers to the proposed longwall extraction area and associated roadway development. A copy of the SMP Plans and the **Approved Plan** are attached at the rear of this document.

### 2.2. SMP AREA

(SMP Guideline Section 6.2)

The 'Application Area' is defined as the area that is likely to be potentially impacted by the proposed mining of Longwalls 705 to 710 in the Bulli Seam at Appin Colliery Area 7. The extent of the SMP Area has been calculated by combining the areas bounded by the following limits:

- The 35 degree angle of draw line
- The predicted vertical limit of subsidence, taken as the 20 mm subsidence contour
- Features sensitive to far-field ground movements.

The 35 degree angle of draw line is described as the "surface area defined by the cover depths, angle of draw of 35 degrees and the limit of the proposed extraction area in mining leases of the Southern Coalfield", as stated in Section 6.2 of the *DPIM SMP Guideline, 2003*. Given that the depth of cover above proposed Longwalls 705 to 710 varies between 470 and 620 metres, the 35 degree angle of draw line has been conservatively determined by drawing a line that is a horizontal distance, varying between 330 and 435 metres around the limit of the proposed extraction area.

The predicted vertical limit of subsidence, taken as the 20 mm subsidence contour, has been determined using the Incremental Profile Method (MSEC, 2008). The predicted 20 mm subsidence contour is generally located within the 35 degree angle of draw line; however, it extends beyond the draw line above adjacent Longwalls 702 to 704.

The 'Application Area' is also referred to as the '*SMP Area*', and is referred to as the *SMP Area* from this point forward. The SMP Area is shown in **Figure 2.1**, and is shown in all figures presented throughout the report.



**Figure 2.1 – Aerial Photograph Showing Longwalls 705 to 710 and the SMP Area**

### **2.3. EXTENT OF WORKINGS**

The extent of workings is the polygon that includes the first workings and extraction that will be undertaken as a result of this application being approved (refer to the **Approved Plan**).