

10.18 Social Impacts

James Marshall and Co (Marshall) was engaged by Centennial Mandalong to assess the social impacts associated with the proposed new operational and infrastructure components of the Mandalong Southern Extension Project. Marshall (2013) advises that a social impact assessment is a systematic, staged approach of enquiry that identifies who may be affected by a Project and how they may be affected. It takes into account the scope of the Project and how the Project will impact on the needs, issues, values and aspirations of the surrounding community. The objectives of the assessment were to:

- Identify the community;
- Assess the social impacts of the Project, including any impacts on local infrastructure and services;
- Assist in establishing the full facts about the Project, to support a well-informed decision about the appropriateness of the Project;
- Assess the impacts of the Project on future generations;
- Inform the community and facilitate participation by the community in the planning and assessment process; and
- Recommend mitigation measures to minimise adverse impacts and maximise benefits of the Project.

The community consultation and engagement activities undertaken by Centennial Mandalong (see **Section 8.0**), which included letters, newsletters, open days, information sessions, face-to-face meetings, site visits and a community survey (by Lantz Marshall Pty Ltd), assisted in the scoping and preparation of the social impact assessment.

A copy of the *Social Impact Assessment* (Marshall 2013), which addresses the relevant issues raised in the DGRs (see **Section 1.7.2**), is contained within **Appendix V**, with significant findings and recommendations summarised below.

10.18.1 The Community

There are a large number of privately-owned residences within the Project Application Area, including 114 residences identified within the Southern Extension Area. The major population settlements are Morisset and Dora Creek, which are located within the Project Application Area (although outside of the Southern Extension Area) approximately 2.5 kilometres to the east and 5 kilometres to the north-east, respectively, of the existing Mandalong Mine Access Site. Wyee is also a major population settlement and is located outside of the Project Application Area approximately 6 kilometres to the east of the proposed Mandalong South Surface Site. There are numerous small townships/villages within and surrounding the Project Application Area, including Bonnells Bay, Beauty Point, Lemon Tree, Dooralong and Jilliby, however none of these populated areas are located within the Southern Extension Area. There are some large lot rural-residential developments within the Southern Extension Area, including in the Durren Durren and Kiar localities.

Community Values

Marshall (2013) advises that residents are attracted to the area because of its rural character and close proximity to regional centres, such as Wyong, Newcastle and Gosford, and emerging centres such as Morisset. Major transport routes, including the Sydney - Newcastle F3 Freeway, the Main Northern Rail Line and Newcastle airport, are also accessible.

The Mandalong Valley and neighbouring Dooralong are picturesque environments and offer an attractive lifestyle choice. Throughout the area are examples of small commercial enterprises, which include galleries, nurseries, agistment, turf farming, poultry production and other limited agricultural activities. These are not dominant features of the area and are not reflected by the Australia Bureau of Statistics (ABS) as primary sources of employment or land use (Marshall 2013).

The rural nature of the area is somewhat protected by land use planning policies that restrict small lot residential development. The community in and around the Southern Extension Area highly regard the rural character and the amenity that comes with this type of lifestyle (Marshall 2013).

Marshall (2013) advises that threats to the social amenity of the area have been strongly opposed. Over recent years this has included opposition to the Wallarah 2 Coal Project due to the potential environmental impact of the longwall mining proposal. The Dooralong community have also taken action against a proposed re-use of the former Dooralong Valley Resort as a drug rehabilitation facility by the Salvation Army (now approved).

Mandalong Community Association

Residents of Mandalong have established the Mandalong Community Association (the Association). The purpose of the Association is to:

... support all members of our community and to build social cohesion and a sense of community amongst the people in Mandalong. We work together to support each other and to confront challenges to our lifestyle and collective rights.

In the past, Centennial Mandalong acquired a number of properties in the area and the Association believes that the acquisition of land resulted in an adverse impact on the social fabric of the community (Marshall 2013). Properties purchased by Centennial Mandalong were tenanted, which, according to the Association, resulted in a loss of community participation in local events and less importance placed on land management. Centennial Mandalong has recently commenced placing some of these properties back on the market for sale.

The Association is represented on the Mandalong Mine CCC (see **Section 8.1.11**) and has also established a mining sub-committee in response to the impacts of mining in the area.

10.18.2 Impact Assessment

The social impacts have been identified by Marshall (2013) via consultation throughout the Project and the specialist impact assessments. Marshall (2013) advises that the potential for adverse impacts on the social amenity of the area are primarily those resulting from subsidence impacts, noise, dust and visual. In the context of this Project social amenity (due to its location and land use characteristics) means the "intrinsic value" that residents place on the area, including rural character, peace and quiet, access to major facilities and visual amenity.

Underground mining will generally result in concerns by all residents who are affected by the mine, with concerns/fears being heightened when undermining is imminent. The on-going consultation process and implementation of the Property Subsidence Management Plans (as part of the Extraction Plan) will be the primary monitoring and management strategies to address community concerns regarding the proposed mining and subsidence impacts.

As detailed in **Section 5.1**, the level of subsidence is largely determined by the geology and mine plan, including longwall panel widths. A mine plan with 300 metre wide longwall panels was initially considered as it would maximise resource recovery and provide a better financial outcome for the Project. However, due to the levels of predicted subsidence with 300 metre longwall widths, the proposed mine plan with a combination of 160 metre, 180 metre and 200 metre wide longwall panels was selected as the optimal option in terms of addressing concerns raised by landholders and to manage potential impacts to the local environment.

While operational noise levels are predicted to comply with adopted criteria at all residential locations, there are some potential noise impacts predicted during the construction phase of the proposed Mandalong South Surface Site and access road. As advised in **Sections 5.2** and **8.1.9**, the location of the proposed surface site was selected as the optimal option by Centennial Mandalong with input from concerned residents. Marshall (2013) concludes, while some noise impacts may be experienced during the construction phase, the chosen surface site has the least impact to the community.

The air quality impact assessment (SLR 2013a) indicates that incremental and cumulative annual average dust deposition rates at all residential locations to the Project will be well below the adopted dust deposition criteria. There are three residential locations predicted to exceed the advisory reporting standard for PM_{2.5} emissions (see **Section 10.10.6**). However, the source of related PM_{2.5} emissions is identified as the existing ventilation fans at the Mandalong Mine Access Site, which represents an existing impact rather than a change in impact as a result of the Project (SLR 2013a). Centennial Mandalong has committed to commissioning additional studies to establish the source of the particulate matter entering the mine and the contribution of this to the total emissions from the ventilation fans at the Mandalong Mine Access Site.

While no exceedances of the odour criterion are predicted at the sensitive receptors surrounding the proposed Mandalong South Surface Site, odour concentrations are predicted to exceed the adopted criterion at the Mandalong Mine Access Site. However, based on the odour monitoring and Community Odour Diary (see **Section 10.10.6**), SLR (2013a) concludes that the odour from ventilation fans is likely to be non-offensive to the community.

The entire footprint of the proposed Mandalong South Surface Site and access road is located upon land owned by Centennial Fassifern Pty Limited. The visual impact assessment (GBD 2013) concluded that the proposed surface infrastructure will have a negligible to low visual impact on people living in or travelling through the area. As outlined in **Section 5.2**, Centennial Mandalong responded to issues and concerns raised by residents in response to the originally proposed location of the Mandalong South Surface Site. Potential alternative locations were investigated and the proposed site was selected as the preferred option. Subsequent communication with the concerned residents indicated that the concerns initially raised had been alleviated.

Marshall (2013) also notes that the Project is unlikely to:

- Significantly impact on surface water and groundwater resources (and the consequential association of landholder properties, livelihood and quality of life);
- Result in aesthetic degradation of the landscape;
- Result in general degradation of the area due to emissions of dust and noise; and
- Impact on the demand and value of real estate in the area.

After reviewing each area of potential impact/concern, including damage to properties and surface features from subsidence impacts, ponding and flooding, noise emissions, air quality emissions and visual/rural amenity, Marshall (2013) concludes that the majority of the Southern Extension Area will remain unchanged as a result of the Project. This includes existing land use, rural characteristic, the manner in which residents and visitors access and move around the area, and the aesthetic quality of the area (Marshall 2013).

The impact to social amenity across the Southern Extension Area will be minimal, with no change to the day to day life of residents as a result of the Project (Marshall 2013). There will be no additional demand for services or facilities (see below) and the impact on social amenity has been mitigated as far as practical through the mine design and siting of surface facilities (Marshall 2013).

Services and Facilities

The Project will generate 115 full-time employment positions (Centennial personnel and contracting staff), which will increase the workforce for Mandalong Mine from the current 305 employees to a total of 420 employees. These positions will chiefly be occupied by workers residing in the local region, with the resultant incomes and household expenditure contributing to the local economy through consumption activity (Aigis 2013).

Figure 63 shows the place of residence for Mandalong Mine’s current employees by postcode with greater than 10 employees.

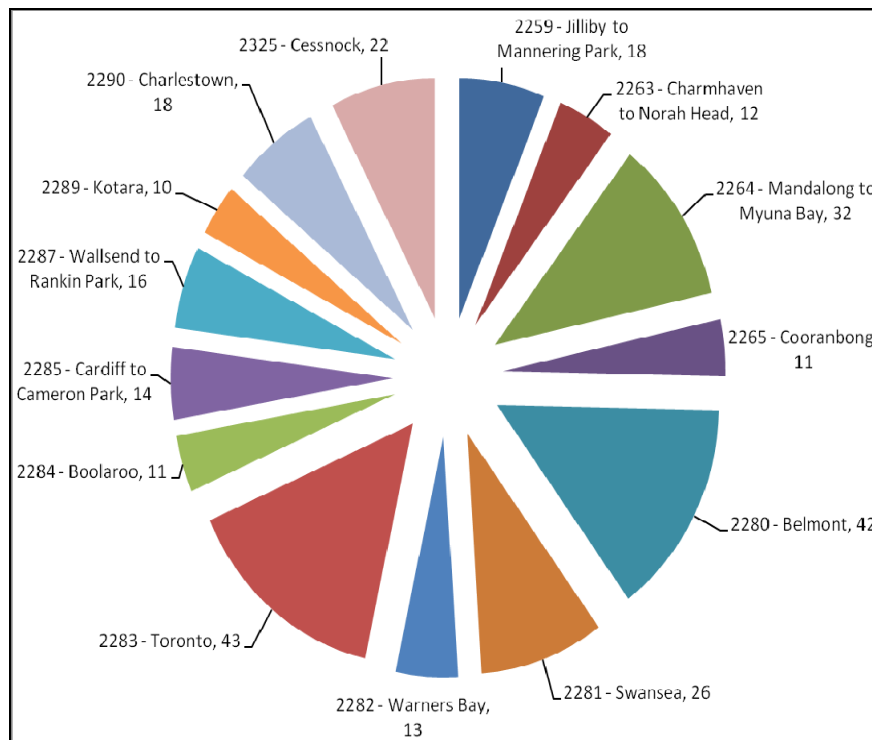


Figure 63 – Mandalong Mine Current Employee Profile by Postcode (with >10 Employees)

The current employee profile for Mandalong Mine demonstrates that employees reside throughout the region (i.e. not only the immediate area). Marshall (2013) anticipates that this trend will continue, with the additional employment positions to be created by the Project likely to be fulfilled from throughout the region. On this basis, the Project will not directly generate the need for additional public infrastructure and/or services (Marshall 2013).

Furthermore, mine related employment will continue to create a positive social impact via direct spending in the communities where employees live and participate in social and recreational activities (Marshall 2013).

10.18.3 Mitigation and Management

Centennial Mandalong is committed to on-going community consultation and will continue to engage with the community for the purposes of providing information relating to the Project and on-going operations of the Mandalong Mine. Centennial Mandalong will continue to operate the Mandalong Mine CCC and a community information line to ensure community concerns can be raised and addressed. Centennial Mandalong will ensure that the CCC has representation from the Southern Extension Area. The existing Mandalong Mine Stakeholder Engagement Strategy will be updated and implemented to provide a consistent management framework for the identification and consultation with stakeholders that have an interest in the Project.