

Executive Summary

Introduction

National Ceramic Industries Australia Pty Ltd (NCIA) proposes to undertake an expansion to its existing ceramic tile manufacturing facility (the facility) at Rutherford, NSW. NCIA seeks Project Approval under Part 3A of the *Environmental Planning & Assessment Act 1979* (EP&A Act) for the project which includes the construction and operation of a second factory building with four additional production lines and its associated infrastructure on a parcel of land adjacent to the existing facility. This Environmental Assessment (EA) also proposes the relinquishment of NCIA's existing Development Consent (No. 449-12-2002-i) and operation of all eight production lines (Stages One – Eight) under a new Project Approval. The EA has been prepared to support the application for Project Approval. NCIA would relinquish their existing Development Consent upon being granted Project Approval for the project as defined in **Section 4.0** of this EA.

The facility currently operated by NCIA was granted development consent DA 449-12-2002-i (consent) under Part 4 of the *EP&A Act* on 2 July 2003 and operates generally in accordance with the supporting Environmental Impact Statement (EIS) titled *Ceramic Tile Manufacturing Facility at Rutherford NSW* and prepared by Parsons Brinckerhoff (2002 EIS) dated 10 December 2002.

Prior to the development of the facility at Rutherford NSW, the majority of domestic ceramic tile consumption was imported from China, South East Asia, Italy, Spain and Brazil.

Since 2004-05, NCIA has been successful in meeting a significant proportion the current domestic tile demand. It is anticipated that this demand will continue to increase in the foreseeable future; therefore NCIA is proposing an expansion of its current facility. The project would also introduce improved technologies into the tile making process, providing efficiencies in both production costs and production rates.

The project is to be located adjacent to the existing facility, located on Lot 101 DP 1062820 Racecourse Rd, Rutherford, within the local government area of Maitland. The existing facility is located within the Rutherford Industrial Estate where land use is predominantly industrial. A former golf course borders the southern and eastern boundaries of the facility, known as Westside Golf Course. This land is the site for a proposed 450 lot residential subdivision called Heritage Green. Approval exists on this site for the redevelopment of the golf course however no development consent exists for any residential development. The northern and western boundaries are bordered by industrial developments.

NCIA is the proponent with 70 % owned by Ceramics Industries Limited (CIL) and the remainder being Australian investors (27.5%) and an Italian investor (2.5%).

Approved Operation

Approved operations are for production lines (Stages One – Four) with a maximum annual production rate of 12.8 million m². The existing facility commenced operations in 2004. The initial operations consisted of one ceramic tile manufacturing line (Stage One) with an average annual production of 3.2 million m² (equal to one quarter of the maximum approved annual production of 12.8 million m²).

In 2007 the second phase of the construction of the factory was completed. This phase completed the infrastructure required to house the approved four production lines (Stages One – Four). During mid-2008, construction of the second production line (Stage Two) was complete. Stage Two operations commenced in August 2009 enabling an average annual production of approximately 6.4 million m² (equal to one half of the maximum approved annual production of 12.8 million m²).

No pre determined implementation timeline exists for Stages Three - Four as this would be driven by market demand and penetration of NCIA's existing product range. As the project (Stages Five – Eight) would create a separate product range, the tiles produced from the project would be marketed in a different product niche to that of the approved facility. As the market is still maturing for NCIA existing product range, the implementation timeline for Stages Three – Four would be market driven and remains uncertain.

The manufacture of ceramic tiles in the approved facility is a process of mixing and preparing raw materials in specified proportions, pressing the prepared mix into the desired shape, and then drying prior to decorating and glazing. The tile is then kiln fired prior to sorting, packaging and dispatch. This process is described further in **Section 1.5**.

The majority of the tiles produced are sold domestically with a small proportion exported to New Zealand.

Project Description

NCIA intends to implement the Continua ceramic tile manufacturing system for Stages Five - Eight. The Continua system has advantages over the current technology, particularly relating to the tile quality and the range of products which may be produced. The process involves grinding and mixing of predominantly clay and other raw materials, followed by a process of drying the mixture, adding dry glaze, roller pressing, additional dry glazing and decorating, additional pressing, cutting to size and firing, prior to packaging and dispatch.

Stages Five – Eight would produce approximately 12.8 million square meters of tiles per annum. Stages Five – Eight would increase total production at NCIA to approximately 25.6 million square meters of tiles per annum.

The project generally involves the:

- Construction and operation of a second factory building adjacent to the current building to accommodate four Continua system production lines (Stages Five – Eight);
- Development and use of associated infrastructure and services such as utility connection, stormwater management and internal roads; and

Relinquishment of NCIA's existing Development Consent (No. 449-12-2002-i) and operation of all eight production lines (Stages One – Eight) under a new Project Approval. NCIA would relinquish their existing Development Consent upon being granted Project Approval for the project as defined in **Section 4.0** of this EA.

The assessments that form part of the EA have all considered the cumulative impact of the approved facility and Stages Five – Eight, that is, the cumulative impacts of Stages One – Eight.

The construction of the new factory building for the project (and associated infrastructure) is anticipated to commence in 2011 and would take approximately 8 months. The works would commence with the civil works, the factory building itself and finally factory fit out.

The new factory building would be constructed in two phases with factory fit out for Stages Five – Eight being market driven and dependant. The first phase of the factory's construction would include all necessary earthworks and site drainage requirements and the factory building to accommodate Stages Five – Six. The second phase would involve enlarging the new factory building to accommodate Stages Seven – Eight. The progressive fit out of the new factory building would be driven by market demand and would correspond to the construction of Stages Five – Eight.

The building that would be constructed to accommodate Stages Five – Eight would be similar in scale and size to the existing building. Raw materials would be stored on the northern end with the manufacturing process progressing north to south along the production line prior to dispatch. The area separating the two buildings would be used largely for stormwater management.

The project would be designed and constructed, by way of leaving space and providing easy connection, to enable the future integration of electricity co-generation facilities. The operation of any co-generation facilities have been not assessed in this EA and would be subject to a future modification.

During operation the project would directly generate 70 employment positions to complement the 70 positions at the approved facility. Additionally, a peak workforce of approximately 50 would be required during the construction phase.

Regulatory

The project has been declared by the Minister as a major project under the provisions of the *EP&A Act* and Clause 9 of Schedule 1 of *State Environmental Planning Policy (Major Development) 2005* (SEPP 2005), and is therefore subject to the provisions of Part 3A of the *EP&A Act*.

This EA has been prepared consistent with the Directory General's Environmental Assessment Requirements (EARs) issued 25 February 2009 (see **Appendix A**) and supports NCIA's application for Project Approval under Part 3A of the *EP&A Act*.

The site is zoned Industrial 4(a) under the Maitland Local Environmental Plan and the project is considered consistent with the objective of the zone.

Stakeholder Engagement

In accordance with the EARs, engagement with the appropriate regulatory authorities, agencies and stakeholders has taken place at the commencement of and as required throughout the preparation of the EA. Engagement with the local community and neighbouring industrial businesses has also occurred as part of this EA. All issues raised are summarised in the EA and includes references to where each has been addressed.

No comments or submissions from the local residential or industrial community were received during the engagement process. Several agencies and key stakeholders made formal submissions and these have been appropriately addressed in **Section 6** of this EA and throughout the impact assessments performed as part of this EA.

Impact Assessment and Management

Key environmental issues are considered to be air quality and noise amenity.

Air quality criteria defined by the Department of Environment Climate Change and Water (DECCW) are predicted to be met for all pollutants at existing private receptors except for PM₁₀. PM₁₀ predictions suggest the potential for cumulative impacts under worst case conditions above the criteria due to elevated background concentrations (which is approaching the DECCW assessment criteria). However PM₁₀ cumulative impacts from the project are not expected to be distinguishable from the existing tile facility or that of the background levels. In relation to PM₁₀ it can be considered that the impacts of the project are consistent with those predicted in the 2002 EIS.

The dispersion modelling indicates that existing sensitive receptors are unlikely to experience adverse impacts from Hydrogen Fluoride (HF) emissions from the project. Some near field impacts at the proposed Heritage Green development have the potential to be above the relevant DECCW vegetation criteria. Based on the results of the impact assessment, no significant adverse impacts are expected at existing sensitive receptors as a result of the project. For HF the general land use assessment criteria was based on vegetation and grazing animals as they are more sensitive to fluoride than humans. As such, the emission limits proposed result in safe HF levels for vegetation and grazing animals. Therefore, human health is also protected (DHS 2007).

Noise emission levels were predicted from the project for a typical operational scenario of eight production lines (Stages One – Eight). The predicted noise levels from the operation of the project at surrounding areas was predicted to be significantly below the project specific noise criteria at all existing residential locations under both calm and prevailing weather conditions. Noise emission predictions from the project indicate that there are some areas of the proposed Heritage Green development that may be noise affected. The degree of affectation would depend on the type of development proposed for different areas of the proposed Heritage Green (i.e. the site layout and orientation). Other important factors influencing the degree of affectation include the implementation of proposed noise attenuation measures identified in the 2006 Heritage Green Statement of Environmental Effects (SEE), to mitigate the acknowledged industrial noise across parts of the Heritage Green site. These measures included noise barrier walls, buffer distances \ distance attenuation and the degree of residential building acoustic design. When compared to the 2002 EIS it can be seen that the noise contribution from the project is similar to that approved for the existing facility, meaning the noise contribution of the project would not change significantly from that already approved.

Reasonable and feasible mitigation measures have been proposed as part of this EA, however some potential impacts are predicted across sections of the proposed Heritage Green development. Noting the separation guidelines identified in **Section 14.4** (which already apply to the approved facility) appropriate design and planning is deemed required on the part of the proposed Heritage Green developers.

Other environmental assessments have been carried out on traffic and parking, visual impact, soil and water. The following outcomes were observed:

- It is considered that the impacts of the project on traffic and parking would be minimal. The SIDRA analysis showed that with the inclusion of the project (employee vehicle trips and truck trips) and the proposed (but not approved) Heritage Green development, the roundabout controlled intersection of Racecourse Road and the New England Highway would continue to function adequately;
- The visual impact assessment determined that the visual impact of the project would be comparable to that of the existing facility. The project would be viewable from locations that already have viewing location of the existing facility, hence a reduced visual impact would result from these locations as the sensitivity of the viewing locations is lower due to the existing industrialised views; and

- The surface water \ stormwater modelling showed that on average, the proposed conceptual stormwater management strategy is effective in attenuating the developed peak site discharge.

Other issues addressed include greenhouse and energy efficiency, hazard and risk ecology, heritage, land use and resources and infrastructure. All these studies concluded that with the appropriate mitigation measures (as identified in **Section 15**) no significant adverse impacts are predicted to occur. Importantly, the predicted minor impacts where they do occur are considered to be consistent with those predicted in the 2002 EIS for the existing facility.

Justification and Conclusion

The project provides an opportunity to expand an existing successful operation which is consistent with other industrial activities in the area, and has the potential to contribute positively to the local, regional, state and national economies.

Stages Five - Eight would be located adjacent to the approved facility on part of the site that has been previously cleared and is located within the Rutherford Industrial Estate which is zoned for general industrial use. The site was originally selected as the preferred location for a ceramic tile manufacturing facility because it is close to both domestic and international product markets, and is in a central location relative to the supply of raw materials.

Section 16 provides a strong justification for the project on social, economic and environmental grounds.

The environmental assessments undertaken as part of this EA have identified that no significant environmental impacts are predicted to occur, and where minor impacts are predicted, appropriate mitigation measures have been recommended (**Section 15**).

NCIA is a successful established business that is committed to the environmental management, growth and development of its tile making facility in Rutherford. NCIA is the only ceramic tile manufacturer in Australia, without whom 100% of Australian ceramic tile demand would necessarily be imported. Domestic demand for ceramic tiles is strong in Australia and NCIA seeks to strengthen its Australian made brands and continue supporting the Rutherford and regional economies both directly and indirectly. The project has been justified in terms of ESD principles and has been shown to be consistent with these principles.