

Environmental and Social Factors

Air Emissions

Air emissions from the Gladstone Steel Plant Project (GSPP) will be generated by two major sources; fugitive emissions from material handling operations and process emissions.

The air quality impact assessment for the GSPP operation is based upon a dispersion modelling study that incorporates GSPP air pollutant sources and emission rates with site-specific meteorology, terrain, land-use and geographical location of sensitive receptors. Cumulative impacts accounting for existing industries (and those approved but not yet operational) within the region are also accounted for.

The GSPP will employ current Best Available Techniques in emissions control and will meet the emission concentration standards set out for the project. The GSPP will be designed to meet the relevant ambient air quality objectives and criteria for all pollutants at sensitive receptors.

Cultural Heritage

Indigenous cultural heritage surveys have been undertaken, and are continuing, in consultation with the Port Curtis Coral Coast (PCCC) Aboriginal Corporation. The PCCC are the Traditional Owners of the land on which the GSPP is proposed.

Boulder Steel Limited (BGD) will work collaboratively with the PCCC in the development of a Cultural Heritage Management Plan (CHMP), to ensure the project is undertaken with due regard to areas of identified indigenous cultural heritage significance and that mitigation processes are in place in the event of discovering a previously unidentified heritage site during GSPP works.

Non-indigenous heritage surveys have also been undertaken. It is considered that there is a low risk of the site impacting any matters of non-indigenous cultural heritage significance.

Flora and Fauna

The GSPP will result in clearing native vegetation from the plant site and areas of associated infrastructure, for example, along the haul road.

Much of the vegetation across those areas of interest for the GSPP have been disturbed by previous landuses, however, there are known to be areas in the vicinity where significant flora species, vegetation communities and fauna habitats exist.

The GSPP, including ancillary infrastructure, will be designed to ensure there is no significant impact to the ecological values of the locations.

Greenhouse Gas Emissions

The Gladstone Steel Plant Project (GSPP) will emit greenhouse gases, particularly carbon dioxide, in the production of steel.

The majority of proposed measures to avoid or minimise direct greenhouse gas emissions are associated with improved technologies to use less energy and materials, and to generate energy from what older steel facilities emit as waste heat.

The employment of such technologies at the GSPP ensure emissions are consistent with those of similar efficient steel plant operations internationally.

Noise and Vibration

A study of the impact of noise and vibration from GSPP construction and operation on sensitive receptors (eg. households) has been undertaken. Analysis combines current noise levels with projected noise levels based on the proposed activities of the GSPP to model noise emissions.

Model results indicate there will be no noise impacts in exceedence of the *Environmental Protection (Noise) Policy 2008* criteria outside the Gladstone State Development Area (GSDA).

Surface Water and Groundwater

The site is located in the Calliope River catchment. Tributaries across the site discharge to the Larcom Creek, approximately 1km to the south of the site, and then eventually into the Calliope River approximately 17km away to the south-west.

Stormwater at the GSPP will be managed to minimise environmental risk and impacts on receiving waters, with 'clean' waters segregated from 'dirty' waters. Clean waters will be diverted to natural flow paths downstream of the GSPP site and dirty waters undergoing pre-treatment prior to being reused back in the process.

Boulder Steel has developed a process water balance for the operation of the plant that indicates that the site will be a 'nil discharge' site for process water.

Groundwater on site lies close to the surface and is of a quality at least suitable for stock watering. No groundwater will be abstracted for the GSPP.

The GSPP will avoid contamination of surface and ground waters via stringent controls; including controls in relation to erosion and hazardous goods management.

Social

BGD is committed to providing the best possible response to potential community impacts from the proposed GSPP. This means being proactive and working with community to identify and understand needs and issues before problems arise.

BGD has undertaken regular consultation with stakeholders, the public and government agencies throughout the Gladstone region since September 2009. The program of consultation will grow as the GSPP progresses through the planning, approvals, construction and operational phases.

Key areas, for which short to long term mitigation strategies will be developed, will be outlined in the Social Impact Management Plan (SIMP).

Traffic

With an increasing number of projects, and an associated expanding population, comes the inevitable increase of traffic on public roads.

A transport impact assessment has been undertaken to identify the key road infrastructure and routes likely to be affected by the GSPP development.

BGD is keenly focused on minimising and effectively managing GSPP's impact in terms of transport and traffic in the Gladstone region, proposing the majority of raw materials to be transported; either via a private haul road or via rail. In addition, the vast majority of the construction and operational workforce will commute to the site via a company-provided bus service.

Environmental Management Plan

A Construction Environmental Management Plan (CEMP) and Operations Environmental Management Plan (OEMP) will be prepared as a component of the BGD Environmental Management System (EMS) to avoid or mitigate impacts associated with the development of the GSPP, in order to protect the values of the existing natural and social environment.