

**IN THE MATTER** of the Resource Management Act 1991

**AND**

**IN THE MATTER** of a submission on Plan Change 13 (Air Quality) to the  
Regional Natural Resources Plan.

**STATEMENT OF EVIDENCE OF THEDA HALL ON BEHALF OF GOLDEN BAY CEMENT**

**1. INTRODUCTION**

**Qualifications**

1.1 My name is Theda Hall. I have the following qualifications:

- Bachelor of Applied Science – Environmental Studies (AUT)
- Graduate Diploma in Environmental Health (Massey University).

1.2 I am authorised to make this statement on behalf of Golden Bay Cement.

**Experience**

1.3 I am employed by Golden Bay Cement (GBC) which is an operating division of Fletcher Concrete and Infrastructure Limited. My present position is Environment and Sustainability Co-ordinator. I have held this position with Golden Bay Cement for 3 years. I previously held the position of Environmental Coordinator for 5 years and Environmental Technician for 3 years, with GBC.

**Responsibilities**

1.4 I am responsible for environmental management at the Portland Cement Works and the Portland and Wilsonville quarries. I also provide resource management advice to our Customer Service Centres throughout the country, and in relation to our coastal cement carrier, the M.V. Aotearoa Chief.

**Scope of Evidence**

1.5 My evidence describes GBC's operations at its Mt Maunganui Service Centre.

## **2. GOLDEN BAY CEMENT OPERATIONS**

2.1 GBC is the only cement manufacturer in New Zealand. GBC manufactures its cement in Portland, north of Auckland. More than 55% of its manufacture volume is distributed by the vessel Aotearoa Chief to ports located throughout New Zealand. The major volume is in the Auckland region, followed by Tauranga, Wellington, Napier, Picton and New Plymouth.

### **Mt Maunganui Service Centre**

2.2 The GBC Mt Maunganui service centre is a bulk cement distribution facility located within the Port of Tauranga port area. The Mt Maunganui service centre is the only bulk cement shipping location in the Tauranga region. GBC has occupied this site for a number of decades.

2.3 The Mt Maunganui service centre consists of 2 gravity silos that are located close to the water's edge which have a capacity of 7000 tonnes of cement.

2.4 The GBC controlled vessel the Aotearoa Chief calls at this port on average 1.5 times per month and discharges varying amounts of cement depending on customer demand for any given season.(winter being slower versus summer months and any major project work) . The method of discharging is by pneumatic conveying through dedicated pumping lines to the bulk silos. A discharge rate of approximately 300 tonnes an hour can be achieved.

2.5 Pneumatic conveying/pumping basically is the process whereby low pressure high volume air is introduced into a pipeline and then cement is metred into the air stream and conveyed to a desired location (the silos). The transport air for this operation is filtered through dedicated dust collectors on top of each silo.

2.6 A dust collector is a chamber filled with cloth bags with a specific surface area that corresponds to the volume of the transport air. There is a suction fan on the outlet of the chamber that sucks the dust through the bags (not unlike a vacuum cleaner but larger). The dust is trapped against the cloth and the clean air is expelled. The dust collector then purges shots of air backwards down the cloth which knocks the cement of the bags and it falls back into the silo. The dust collectors are regularly serviced and continuously monitored during the ship discharge.

2.7 As a contingency, the service centre can utilise 20 foot container sized pressure vessels,"Iso Tanks", to supply cement to the service centre. These Iso tanks can be used both for loading into the service centre and loading out of the service centre. The

ship discharging and the bulk tanker and pressure pods loading in and out along with boutique bagging are the operations carried out on this site.

- 2.8 In the past we have also bagged cement for the local market at this site, but due to automation at the manufacturing site it has become cost beneficial to supply from there.

#### **Distribution from the Mt Maunganui Service Centre**

- 2.9 Following pneumatic conveying to the silos at the Mt Maunganui service centre, the bulk product is then distributed from the service centre using specialised road tankers to the Tauranga and Bay of Plenty regions. These regions receive an approximate annual volume of 110,000 tonnes of cement, but this will vary depending on the economic climate and regional activities. All the cement that is distributed through the service centre goes directly to the regions ready-mix plants to be added to their mix to become concrete for all construction industry activities. A small portion also goes into stabilization work.

#### **History of consenting and compliance**

- 2.10 The Mt Maunganui Service Centre site holds a Discharge Permit from the Bay of Plenty Regional Council (Consent number: 62655) for the purpose of discharging cement and particulate matter, dated 30 July 2004, expiring 31 May 2024.
- 2.11 There have been minor incidences of discharges to air from the conveying of cement through the service centre. Because the operation is manned at all times during this operation, incidents have been detected and responded to immediately, as per the site emergency spill response procedures, to avoid environmental impact. All cement storage and conveyancing equipment is subject to a routine inspection and maintenance regime. There have been no complaints or infringement notices issued to GBC, or other enforcement action taken.

### **3. ALTERNATIVES**

- 3.1 There are very few (if any) alternatives to supply bulk cement to this region, economically. If we use the Aotearoa Chief for supply then the location must be either Ports of Tauranga or a new facility will have to be set up in another port location with bulk cement handling capabilities. As cement cannot be discharged from a ship to a truck, the only other available alternative option is the use of Iso Tanks (as these can move onto rail or road as required). If we used Iso Tanks, cement could be transported by rail or road, and our operation could be performed in another location. However the

logistics of this would need to be explored and costed, and it would be far less efficient than the current established operation (and likely cost-prohibitive).

3.2 Given that this is an established operation with few if any adverse effects it is difficult to see how, from an operational perspective, the need for an alternative location can or should arise.

3.3 The Mt Maunganui Service Centre location is critical to being able to pneumatically pump cement from our ship, the Aotearoa Chief. If we were not able to discharge our ship on this site we would be forced to explore a new location for our operations and an alternative means of distribution.

#### **4. CONCLUSION**

4.1 In conclusion GBC is the only genuine New Zealand cement manufacturer. Operating at the Port of Tauranga is critical to the supply chain of Golden Bay Cement.

4.2 The GBC Mt Maunganui Service Centre has been operated in its current location for many years. In this time, we have conducted our business in a professional and environmentally friendly manner, and have had no complaints due to our operational procedures that I am aware of. We have complied with all regulatory requirements and undertake regular maintenance and monitoring of our plant and equipment to ensure compliance and efficient use of our plant. We support the local economy and have a very good working relationship with Port of Tauranga.

**Theda Hall**

**12 October 2018**