

BEFORE THE WHANGAREI DISTRICT COUNCIL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of Submissions and Further Submissions lodged
by **GBC Winstone** to Proposed Whangarei
District Plan Changes (PC)
PC 85 Rural Areas
PC85A Rural Production Environment
PC85B Strategic Rural Industry Environment
PC85D Rural Living Environment
PC86A Rural (Urban Expansion) Environment
PC86B Rural (Urban Expansion) Living
Environment
PC87 Coastal Area and
PC102 Minerals

**STATEMENT OF EVIDENCE OF THEDA HALL
ON BEHALF OF GBC WINSTONE**

Submitter Number 250

1. Introduction

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 GBC Winstone.

2. Experience

2.1 I am employed by Winstone Aggregates (Winstone) and Golden Bay Cement (GBC) which are operating divisions of Fletcher Concrete and Infrastructure Limited and operate under the name GBC Winstone. In my evidence I refer to GBC Winstone collectively, except where I need to differentiate between their respective operations.

2.2 My present position is Environment and Sustainability Co-ordinator. I have held this position with GBC Winstone for 2 years. I previously held the position of Environmental Coordinator for 5 years and Environmental Technician for 3 years, with GBC.

3. Responsibilities

3.1 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.

3.2 I have the environmental resource management responsibilities for our quarries which are required for cement production, while my colleague, Ian Wallace, has the environmental resource management responsibilities for the Whangarei District aggregate quarry.

3.3 I have been involved in the rolling review of the Whangarei District Plan (WDC Plan) throughout the time I have been employed by GBC Winstone and have carefully considered the relationship between the various parts of the plan which have already been reviewed and those still to be reviewed. I am concerned that the process should achieve consistency, and for GBC Winstone, the ability to continue operating and, as necessary, expanding, the quarries and cement plant. I discuss this further below.

3.4 In relation to the Plan Changes which are the subject of this evidence, I have been involved in the preparation and lodging of the submissions, review of the summary of

submissions, preparation and lodging of further submissions, review of the planner's section 42A report and obtained expert advice in relation to the Plan Changes.

- 3.5 My evidence is provided to help the Panel understand the scope of the GBC Winstone operations and the matters that underpin its concerns with the Plan Changes. Catherine Clarke's evidence responds more directly to the recommendations in the section 42A report and the changes that are required to facilitate GBC Winstone's ongoing operations in the district, while ensuring that the effects of its operations are appropriately managed.

4. The GBC Winstone Operations: Background

- 4.1 Winstone is New Zealand's largest manufacturer and distributor of aggregates and sand to roading contractors, ready mixed concrete and concrete product manufacturers, and to building and civil engineering customers. Within the Whangarei District Winstone currently operates a quarry at Otaika.
- 4.2 GBC is the largest cement manufacturer in New Zealand. It is the owner of substantial areas of land located at Portland and Hikurangi. GBC's operations in Whangarei include two quarries and a cement manufacturing plant. Nationally, GBC also operates a Microsilica deposit, a bulk storage facility in Auckland and five other distribution centres.
- 4.3 A sustained supply of minerals and aggregate is essential for the continued development of the Northland Region to enable people and communities to provide for their social, economic and cultural wellbeing. In particular, a sustained supply will enable building and development associated with population growth, maintenance of existing buildings and infrastructure and roading projects around the region.
- 4.4 Industrial rocks and building stones are extracted in the District and used in the local economy for building, industry and roading infrastructure. Limestone is extracted and used in the manufacture of cement, for agricultural purposes and for roading.
- 4.5 The economic significance of GBC Winstone's operations in the Northland region is set out in the evidence of Ian Wallace.

5. GBC Operations: Cement Plant

- 5.1 The Portland Cement Plant was established in Whangarei more than 100 years ago. It has had substantial upgrades to ensure that the technology is current with modern and energy efficient cement manufacturing techniques. The plant has a current annual manufacturing capacity of approximately 1 million tonnes, and supplies the

majority of New Zealand's domestic cement market as well as exporting to the Pacific Islands.

- 5.2 The raw material for cement is predominantly produced by the two quarries as described below. The Portland Cement Works and Portland Quarry have common boundaries and are linked by the public road network, but importantly are also linked by a 1.6km long conveyor which runs from the rock crusher at the Portland Quarry to a receiving raw materials reclaimer building at the Cement Works.
- 5.3 At the end of the manufacturing process the bulk of the product is shipped off-site by the MV Aotearoa Chief. The Cement Works is serviced by a cement wharf, mooring dolphin, pipelines and support structures which extend 1km into the Coastal Marine Area. The ability to ship product nationally substantially reduces heavy vehicle movements on New Zealand roads.
- 5.4 It is also relevant to identify other materials used in the manufacture of cement as these must all be brought in to the site at Portland and stored either at the Portland Cement Works or at the Portland Quarry.
- Iron-sand from Taharoa is the primary source of iron oxide to boost the deficiency of this compound in the marl from Portland Quarry. Approximately 10,000 tonnes of this raw material is used annually.
 - Coal, although a fuel source, is considered a raw material as the ash from the combustion of the coal is retained in the process and entrained in the product. Coal ash is a key contributor to the resultant desired cement chemistry. Approximately 80,000 tonnes of coal is used per annum.
 - Likewise wood-waste as fuel is considered a raw material. Ash from the combustion of wood waste is also entrained in the product and is a contributor to cement chemistry. Approximately 70,000 tonnes of wood-waste is used per annum
 - Natural gypsum is a key ingredient of cement. It is added at the final stage (cement milling) of cement manufacture and acts as a setting regulator. Approximately 30,000 tonnes of gypsum is used annually.
- 5.5 Coal and wood waste are brought in by truck and stored at the Cement Works. The iron sand and gypsum is also trucked in, but is stored at the Portland quarry and transferred to the Cement Works on the conveyor.

6. GBC Operations: Quarries

6.1 GBC operates two quarries to extract the primary raw materials.

- Wilsonville (Hikurangi) Quarry is the source of high grade limestone (calcium carbonate – CaCO₃) and approximately 500,000 tonnes of this is transported to the Tikorangi (Portland) Quarry annually. The material produced at Wilsonville is trucked to the Portland Quarry, crushed in the rock crusher and then transferred to the Cement Works by the conveyor.
- Portland (Tikorangi) Quarry is the source of argillaceous marl which contributes the key compounds of calcium carbonate, silica oxide, alumina oxide and iron oxide. Approximately 1 million tonnes of marl is used per year. A rock crusher is situated at the Portland Quarry and the crushed rock is transported to the works on the conveyor.

7. Strategic Industries

7.1 The physical scale of the four elements of the GBC Winstone operations in Whangarei are significant.

7.2 All four elements are recognised as regionally significant or strategic resources in the Northland Regional RPS and the WDC District Plan. As the only cement producer of scale in New Zealand, the Portland Cement Works, and by extension the quarries providing raw material to the Works, are nationally significant. They cannot relocate as they are tied to the location of the resources. The Cement Works is also tied to its marine berthing facility.

7.3 These resources need to be able to continue operating without unnecessary constraints. In the case of the quarries, the extraction activities move within the mineral resource area over time and, in the case of the cement plant, room for expansion, upgrades and related activities is required. This need underpins the approach of GBC Winstone to the WDC Plan provisions. At the overview level, GBC Winstone is looking for provisions which do not just “provide for” the operations. It is looking for provisions which reflect the significance of the operations and both facilitate them, and allow them scope for expansion.

7.4 The WDC Plan establishes a complex network of controls over the GBC Winstone activities. All of them are located within the Rural Area. In respect of the Otaika Quarry, it is within a Rural Production Environment (RPE) with an MEA Resource Overlay. The Wilsonville Quarry is also within the RPE with an MEA Resource overlay.

- 7.5 The Portland Quarry is substantially within the RPE but also partially within the SRIE. It also has an MEA overlay and in addition is partially affected by the Coastal Area Resource overlay.
- 7.6 The Portland Cement Works is within the SRIE, is affected by the Coastal Area Resource overlay and is partially affected by the MEA Resource overlay.
- 7.7 It is important to ensure that the provisions within the hierarchy of controls are consistent, do not contain internal conflicts and facilitate our strategic and significant operations. Catherine Clarke's evidence addresses the specific provisions which GBC Winstone considers require change and provides the planning justification for change. The remainder of my evidence will explain their importance from an operational perspective.

8. SRIE Portland

- 8.1 The Strategic Rural Industries Environment (Portland) is intended to replace the Business 4 Environment which is currently applied to the GBC land from MHWS to the Countryside Environment of the Portland Quarry. It also replaces the special provisions of the Portland Cement Works Overlay as discussed above. A key problem with the SRIE Portland is that despite the GBC Winstone submission, it is focused only on the Portland Cement Works. The operative Business 4 Environment provides for general business and industrial activity which recognizes the potential for the land adjacent to the Cement Works to be used for those purposes, either to support the GBC operation or to accommodate other rural appropriate business activities.
- 8.2 The reality is that the Business 4 Environment (proposed SRIE) is also occupied by the Marusumi Woodchip Mill operation which is clearly an integral part of the SRIE. It has a dedicated road from SH1 to its site within the SRIE for its heavy vehicles. This road is also used by refuse trucks to access the Purewa landfill, and by GBC Winstone for the delivery of coal and woodchip. There is an important synergy between the various components of these operations.
- 8.3 The scope to increase and consolidate business activities within the Business 4 Environment at Portland should not be squandered. The location has supporting infrastructure and critical mass provided by the existing operations. The rules for the SRIE (Portland) should therefore be sufficiently widely drawn to enable the efficient development of this land.

9. SRIE Rules

9.1 The Portland Cement Works and the part of the Portland Quarry that contains the access road, service buildings, storage areas and the rock crusher have been recognised as being interconnected. Under the operative WDC Plan they enjoy the advantage of the Portland Cement Works Overlay. That Overlay sets up a matrix of rules that modify the provisions of the underlying Business 4 and Countryside Environments, and the Mineral Extraction Area provisions, to protect:

- the height of the rock crusher, the conveyor and other buildings utilised for cement manufacture,
- the location of the conveyor and cement manufacturing buildings where they might otherwise infringe setback requirements, and
- traffic movements

which might otherwise infringe the standard Environment Rules.

9.2 These special provisions were the outcome of lengthy negotiations with WDC during the development of the operative plan. They were negotiated as specific exceptions to the Business 4, Countryside and Coastal Countryside Environment rules to recognise the significance of the Portland Cement Works and Quarry. They have been in place now for over 15 years and have worked effectively without any apparent adverse effects on the environment.

9.3 In theory, the SRIE Portland is intended to preserve those provisions. However, GBC Winstone is concerned that the structure of the Plan Changes undermines these provisions. While the changes that GBC Winstone wants are outlined in detail in Catherine Clarke's evidence I provide two examples to demonstrate their importance.

- The provision providing for unlimited traffic movements has been deleted on the basis that activities not otherwise specified are treated as permitted. Therefore unlimited movements are, on the face of it, permitted. However, I make the point that the Section 42A report Part 1 states at para 176 that a Transportation Plan Change (PC109) has already been drafted and "seeks to introduce district wide provisions for transport and land use integration and update the roading hierarchy map". I consider it important that the provision protecting our unlimited traffic movements is explicit in the plan change under consideration now, so that the importance of it is plain. I do not want PC 109 to be based on the assumption that traffic movements are unregulated because no one has given them

consideration before. I want it to be absolutely clear that this is a special provision which arose because of the strategic and significant nature of our operation and has been thoroughly canvassed through previous iterations of the plan.

- Similarly the height and setback provisions are undermined by the new requirement that limitations are imposed where buildings adjoin any Living, RPE or Open Space Environment. GBC does not want to rely on existing use rights where the rock crusher, conveyor or other buildings used for cement manufacture have to be replaced, updated or new ones constructed. General industrial or farm buildings are not facilitated by this rule, it is strictly confined to the rock crusher and buildings for cement manufacture. For example, as demonstrated by my earlier evidence, the conveyor, which is a very substantial structure, is essential to the Portland operation in terms of transporting raw material between the quarry and the works. The conveyor varies in height throughout its length, but significantly it crosses a public road close to the Portland Recreation Ground which is zoned Open Space. It is likely that any reconstruction of the conveyor in this location would infringe the proposed height and setback requirements unless an exception is made to the permitted activities in SRIE 2.4.1. This is discussed further in Catherine Clarke's evidence. The conveyor provides a very important public benefit by removing truck movements through the Portland Village which would otherwise be required for the transportation of the crushed rock and other raw materials. Facilitating its replacement or renewal properly reflects the strategic importance of the Portland operation and, again, this is a provision that has been thoroughly canvassed through previous iterations of the plan.

10. Rural Provisions

- 10.1 As you will see from the discussion above the GBC Winstone sites are all wholly or partly within the RPE and are therefore affected by the definition of "Rural Production Activity". While the GBC Winstone operations clearly fall within the Rural Area the section 42A report recommends against including mineral extraction and Strategic Rural Industries in the definition of Rural Production Activity. With respect, this does not appear logical. They are activities which are appropriately located within the Rural Area and involve production. It seems highly likely that nearly all, if not all, mineral extraction within the District would take place within the Rural Area. The same applies to the location of the Strategic Rural Industries (my emphasis added). Given GBC Winstone's concern to achieve consistency throughout the Plan, we consider it important that these activities be included in the definition of Rural

Production Activity.

11. Coastal Provisions

- 11.1 As outlined above the provisions which apply at Portland are complex because of their overlapping nature. It is therefore important to identify which prevail when there is a conflict.
- 11.2 The section 42A report recommends that the Coastal provisions prevail over the SRIE and MEA provisions. However, the SRIE and MEA provisions are special purpose provisions affecting a confined area, which are intended to recognise and facilitate the strategic and regional importance of the activities they provide for. The Coastal provisions on the other hand apply widely, without having been specifically designed for individual locations. In my view, specific provisions should take precedence over general provisions and the SRIE and MEA provisions should prevail over the Coastal ones. This is particularly the case in relation to controls such as indigenous vegetation removal and earthworks. It is an integral part of mineral extraction activities that there will be large scale earthworks and that vegetation will be disturbed. The SRIE and MEA provisions recognise and facilitate these requirements. It does not assist these activities if they are then burdened with a more restrictive set of requirements because of the Coastal overlay.

12. Carter Road Mapping Error: Submission 250/14

- 12.1 The section 42A Report Part 1 Section L Transport and Transport Infrastructure addresses the error on Planning Maps which still identifies Carter Road. The former Carter Road was legally stopped in 2002 and the part described as Section 1 on SO Plan 70083 was transferred to Fletcher Concrete and Infrastructure Limited in 2003. GBC Winstone has requested the removal of the reference to Carter Road from the Planning Maps. At para 173 of the report it is stated "GBC have not supplied any evidence to support this request". The report also states that the WDC GIS maps identify Carter Road as a private access road.
- 12.2 I attach to my evidence:
- a copy of the Environment Court Order dated 1 May 2002 for the stopping (attachment A);
 - a copy of the agreement for sale and purchase between Whangarei District Council and Fletcher Concrete & Infrastructure which records the sale of the Section 1 of SO Plan 70083 (attachment B);

- a copy of Identifier 43491 being the certificate of title for Section 1 of SO Plan 70083 (attachment C); and
- a copy of SO Plan 70083 (attachment D).

12.3 The former Carter Road is a long narrow parcel of land with the same status as all the other land owned by GBC and comprising the Wilsonville Quarry. It is not used for access and in due course quarry operations will move through it. It is therefore inappropriate to continue showing this lot as Carter Road on the planning maps.

Theda Hall

6 July 2017

Attachments

Please refer to the attached pdf file containing the following attachments:

- A. a copy of the Environment Court Order dated 1 May 2002 for the stopping;
- B. a copy of the agreement for sale and purchase between Whangarei District Council and Fletcher Concrete & Infrastructure which records the sale of Section 1 of SO Plan 70083;
- C. a copy of Identifier 43491 being the certificate of title for Section 1 of SO Plan 70083; and
- D. a copy of SO Plan 70083.