



**BAY OF PLENTY
REGIONAL COUNCIL
TOI MOANA**

Submission Form

Send your submission to reach us by **4.00 pm Wednesday, 18 April 2018**

Submission Number
Office use only

027

Post: The Chief Executive Bay of Plenty Regional Council PO Box 364 Whakatāne 3158	or Fax: 0800 884 882	or email: air@boprc.govt.nz
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Submitter Name: GBC Winstone (a Division of Fletcher Concrete and Infrastructure Limited)

This is a submission on **Proposed Plan Change 13 (Air Quality)** to the **Regional Natural Resources Plan**

I **could not** gain an advantage in trade competition through this submission.

- 1 (a) I am directly affected by an effect of the subject matter of the submission that adversely affects the environment; and
(b) My submission does not relate to trade competition or the effects of trade competition.
- 2 The details of my submission are in the attached table.
- 3 I wish to be heard in support of my submission

18 April 2018

[Signature of person making submission or person authorised to sign on behalf of person making submission.]
[NOTE: A signature is not required if you make your submission by electronic means.]

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SUBMISSION POINTS:

Page No	Reference (e.g. Policy, Rule, Method or Objective number)	Support/Oppose	Decision Sought Say what changes to the plan you would like	Give Reasons
5	New rule AQ RX	Oppose omission of specific rule enabling discharge to air, as a permitted activity meeting conditions, for cement handling and storage at Port of Tauranga	<p>(amend to add new rule:)</p> <p><u>AQ RX</u></p> <p>At Port of Tauranga, Mount Maunganui, the discharge of contaminants to air from cement storage, handling, redistribution or packaging, and associated fly ash and microsilica, is a permitted activity provided the following conditions are complied with:</p> <p>(1) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the subject property or into any water body.</p> <p>(2) Cement is stored in fully enclosed silos that must be fitted with a filtration system with a filter surface area of at least 24m².</p> <p>(3) There must be no visible discharges of dust.</p> <p>(4) Cement, must be delivered, from ship to silo and from silo to truck, via a fully enclosed system. Cement additives, such as microsilica, microsilica fume and fly ash, must only be de-bagged and</p>	As attached submission

		<p><u>bagged within an enclosed structure fitted with dust control equipment.</u></p> <p><u>(5) Silos must either have an automated remote filling system or be fitted with a high level alarm that has both an audible and visual indicator and when the alarm is triggered it will stop the filling of the silo.</u></p>		
1	<p>New policy <u>AQ PXX</u> and new rule</p>	<p>Oppose omission of policy providing permitted activity status for an industrial and trade activity, namely cement handling and storage, where conditions can be applied to avoid and mitigate adverse effects</p>	<p>As an alternative to the new rule <u>AQ RX</u> above, there should be an additional policy and rule, enabling discharges to air from industrial and trade activities as permitted activities, where their potential effects are known and mitigations can demonstrate that effects are managed to specified acceptable levels. The rule would list the industrial and trade activities, and the conditions they would be required to meet to be permitted activities.</p>	<p>As attached submission</p>
1	<p>AQ P1 and new rule <u>AQ RX</u></p>	<p>Support policies in part, but oppose omission of policy management approach permitting a range of industrial and trade activities, including cement handling and storage, where activity's effects and effective mitigations are known and can be conditioned.</p>	<p>As an alternative, Policy <u>AQ P1</u> should be qualified to permit discharges to air from industrial and trade premises where permitted activity conditions are met, accompanied by a new rule listing the known industrial and trade activities and identifying their industry specific discharge conditions, including (new rule) <u>AQ RX</u> for cement handling and storage as proposed above.</p>	<p>As attached submission</p>

Reasons for submission

Description of GBC Winstone operations at Port of Tauranga

GBC Winstone – a Division of Fletcher Concrete and Infrastructure Limited (hereafter GBCW) operates and maintains a cement service centre at Port of Tauranga in Mt Maunganui. The cement manufacturing plant is situated in Portland, 10kms south of Whangarei and the main support office is located in Central Auckland. There are six GBCW service centres located around NZ, in Auckland, Tauranga, Napier, New Plymouth, Wellington and Picton. The Mt Maunganui Service Centre in Tauranga, like other service centres that are operated by GBCW, is required for the bulk storage and handling of cement, prior to sale in bulk to customers. Cement is the main ingredient of concrete from which a considerable amount of New Zealand's infrastructure is built. The Mt Maunganui Service Centre is located at 160 Hewletts Road and accessed from Tasman Quay, and has a total area of 6,898m². The land on which the operation is located is part of Port of Tauranga and there is a specialised ship berth and pneumatic pipelines for unloading bulk cement.

The GBCW Mount Maunganui service centre activities and products include receiving bulk cement, unloading and storage, and dispatching by road to customers.

Bulk general purpose (GP) cement is delivered via the specialised bulk cement carrier MV Aotearoa Chief, pneumatically pumped to the bulk silos, then distributed via road cement tankers direct to customers.

Cement is also bagged into 25Kg bags and palletised for the New Zealand domestic market. A small volume of fly ash is trucked in sealed within large bags, de-bagged and dispatched by road tanker or re-bagged and palletised for the domestic market and dispatched by truck.

Bagged Microsilica fume is imported from China in containers across the Port of Tauranga and comes in 1 tonne bags as well as 10 Kg bags palleted and wrapped. The 1 tonne bags can be de-bagged directly into road tankers using the de-bagger pneumatic conveying inside the building, with the 10 Kg bags dispatched direct to customer.

Indian Fly ash is imported into NZ across the Port of Tauranga wharf in containers, in 1.3tonne bags.

These are de-vanned and stored in C3 storage facility and delivered to site for de-bagging and re-bagging in 10Kg bags as required.

Traditionally fly ash is picked up from the Huntly power station and is a waste product from burning coal, "Fly" meaning light enough to be picked up in the air stream and "Ash" meaning what is left after burning. It is then transported using bulk road tankers to Eastport (Auckland waterfront) for storage. The consistency of supply has caused concern regarding supply to GBCW customers, therefore the need to import fly ash to fill the gap and consequently having to de-bag it.

The method of de-bagging is through a purpose built de-bagger that has dust collection built in. This is then screwed into a storage silo ready for road tanker loading and delivering direct to customers. The screw tight de-bagger means no pneumatic pumping therefore a reduction in airborne transport dust, and the de-bagging operation is contained inside the GBCW facility.

In terms of discharges to air, the cement transfer systems use air mixing and air pressure to transport cement powder through sealed pneumatic pipelines. The pressurised air is then passed through baghouses, which remove the cement and discharge the air to air.

The form of airborne contaminant potentially emitted by the cement handling operation on the site is cement dust. Additional materials to be blended with the cement include fly ash and microsilica, which arrive in bags and are de-bagged within the building by a sealed system which places the materials in the enclosed dispatch hopper. The dust mitigation measures that are in place at the site are intended to ensure that there are no dust emissions beyond the boundary of the site. Section 15(1)(c) of the Resource Management Act 1991 restricts the discharge of a contaminant from any industrial or trade premises into air unless the discharge is expressly allowed by a national environmental standard, a rule in a regional plan, or a resource consent. GBCW holds an air discharge permit from Bay of Plenty Regional Council (Discharge Permit No: 62655), for the discharge to air from the bulk storage and pneumatic conveying of bulk cement on site, which will expire on 31 May 2024. When this resource consent expires, within the lifetime of the Natural Regional Resources Plan, GBCW should be able to rely on meeting permitted activity standards for discharges to air.

In summary, the activities on the site include the pneumatic conveying and storage of cement associated with the storage and distribution of cement products in the Bay of Plenty. Several stages in this process create the potential for the discharge of dust from the operations. However, the site equipment is fitted with mitigation devices, including filter bags (baghouses), which remove any dust from displaced air and, therefore, has a less than minor actual effect beyond the site boundary.

Section 32 Evaluation Report

Community consultation, undertaken during preparation of the plan change, identified that objectives, policies and rules used the term “avoid” or “protect”. It was considered by many commenters to be too high a threshold and impossible to comply with while carrying out any discharge activity. The term was changed either to “avoid significant” or to “minimise” where appropriate. (Table 4.4, page 42, Section 32 Evaluation Report).

Consultation with iwi and hapu within the Mauao constituency raised the issue that:

“The plan needs to start off as protective as possible, with “avoid”, rather than “remedy” or “mitigate”. Attendees of this meeting find that during submissions process the provisions are weakened to “remedy” or “mitigate”. Better to start as strong as possible and it is up to submitters to demonstrate why they shouldn’t have to avoid, rather than iwi and hapu having to demonstrate why avoidance is needed.” (Table 4.6, page 45, Section 32 Evaluation Report).

This resulted in requirements to have “avoid” and “protect” retained in the Plan Change. The purpose of the RMA includes enabling social and economic well-being while avoiding, remedying or mitigating adverse effects.

The purpose of the RMA is to promote the sustainable management of natural and physical resources, meaning managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—

- (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
- (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
- (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

Council will be well aware of the consequences of use of directive terms such as “avoid” and “protect” in a statutory plan, since King Salmon Co Ltd [2014] NZSC 38 (and RJ Davidson Family Trust v Marlborough District Council [2017] NZHC 52). If not qualified, it would require a prohibited or at least non-complying activity status, and not just make every discharge from industrial or trade premises a ‘catch-all’ discretionary activity. It is straight-forward for known industrial and trade activities to have permitted activity standards identify the thresholds at which adverse effects will be less than minor, a higher threshold at which they are minor but controllable, or when discretion would be needed on matters to ensure effects are managed or the activity declined consent. The objectives and policies of the proposed plan change require avoidance only in a few qualified activities. However, the policy framework overall proposes three categories of activities. The first is the permitted activities, where discharges can be suitably managed by general conditions (AQ P1(a)). The second is the group of problematic activities which can only occur subject to specific conditions (AQ P5,6,7,8,9,10). The third set of activities involving discharge to air is a ‘catch-all’ category which requires controlled, discretionary or non-complying activity resource consent (AQ P1(b)). This is not an efficient approach to dealing with control of discharges to air, when many other activities could have specific conditions applied to manage their effects as permitted activities. Bulk cement handling and storage is one such activity. Note that proposed rule AQ R17 provides for abrasive blasting as a specified permitted activity, which is similarly contained and has air extracted through filters.

The s.32 evaluation report refers to reports commissioned by Council, on dust at Port of Tauranga, in 2012 and in 2016. No cement dust was identified by these reports. The 2016 report identified that a main source and activity contributing to dust was bulk cargo handling – transferring product from ship hold to hoppers, overfilling trucks, spilt product on the wharf, and working in high winds, none of which apply to the cement handling and storage operations. The GBCW cement handling and storage at Mt Maunganui is undertaken using a specialised ship, sealed pneumatic pipelines and sealed storage silos. The air used to transport the cement through the pipelines is discharged to air through baghouses, which prevent dust escaping from the facility. Ancillary materials to be blended with the cement are de-bagged and re-bagged in an enclosed environment, also with dust removal devices.

As a consequence of the overall Port of Tauranga dust investigations, the sulphur dioxide exceedances and ongoing issues with various contaminants, the Regional Council is establishing a comprehensive and expanded monitoring network in the Port/Mount area. This monitoring framework is a non-regulatory method included within the plan, and would inform future plan changes, background ambient air quality, and applications for discharges to air.

The s.32 report then described that AQ Rule 1 “retains the restrictive presumption of the RMA where discharges from industrial and trade premises cannot discharge without a consent, unless the plan otherwise allows.” The RMA is not a restrictive presumption, and anticipates that consents can authorise discharges, and also that permitted activity standards can be applied, to manage the adverse effects of discharges and to enable activities to occur when they meet those standards. There is no efficiency or effectiveness in a rule that requires all discharges from industrial and trade premises to obtain a discretionary activity consent, when standard industrial practices are used to mitigate effects to an acceptable level.

Objective, policy and rule approach

The objectives and policies proposed by Plan Change 13 – Air Quality are supported, however the activity status rules and permitted activity standards do not give effect to those in terms of the GBCW Service Centre operations.

The Objectives appropriately include protecting air from adverse effects; adopting ambient air NESAQ standards and AAQG guidelines; and managing of discharges of contaminants to air.

The Policies propose classification of activities to manage the discharge of contaminants to air; avoidance or best practicable option for discharge of hazardous substances to air; management of discharges of activities that discharge contaminants to air; and matters to consider when considering the acceptability of any discharges of contaminants to air.

The policies set up a framework for managing the effects of discharges of contaminants to air. They also identify a number of specific activities, such as open air and solid fuel burners, agricultural spraying and fumigation, which have been identified as problematic and need prescriptive management policies. Industrial and trade activities are given a generalised rather than activity-specific policy approach, and that generalisation is carried through into the rules.

The rules applying to the GBCW cement handling and storage operations, and other industrial and trade activities, include:

AQ R1, which excludes all discharges from industrial and trade premises from being permitted activities;

AQ R2, which makes any discharge of contaminants into air which cannot comply with any permitted activity rule, or is not a controlled or non-complying activity under another Air Quality rule, into a discretionary activity; and

AQ R21, which makes specific activities with known effects into discretionary activities (including “cement manufacture” but not “bulk cement handling and storage”).

The rule treatment of the GBCW operations is that they involve discharge of contaminants into air, from industrial and trade premises and so are not a permitted activity (AQ R1); that failing that permitted activity rule and having no alternative industry-specific activity status makes them a discretionary activity. This over-generalises the treatment of all industrial and trade activities, where many have been specifically designed to mitigate their adverse effects to not have a minor or more than minor effect. The policy AQ P1, on classification of activities, should allow these as permitted activities, as being “activities where the discharge can be suitably managed with general conditions to avoid, remedy or mitigate any adverse effects of the discharge”(Policy AQ P1 (a)).

For example, the Auckland Unitary Plan – Operative in Part, Air Quality Chapter E15:

“Permitted activity standards

E14.6.1.12. Cement storage, handling, redistribution, or packaging

(1) Cement is stored in fully enclosed silos that must be fitted with a filtration system with a filter surface area of at least 24m².

(2) *There should be no visible discharges of dust.*

(3) *Cement must be delivered via a fully enclosed system.*

(4) *Silos must either have an automated remote filling system or be fitted with a high level alarm that has both an audible and visual indicator and when the alarm is triggered it will stop the filling of the silo.*”

Such a permitted activity rule approach can provide certainty to the operations and the environment, relying on proven design and performance of the cement handling and dust mitigation systems. The filter surface area standard may relate to the size of pneumatic handling plant and its intensity of operation, so it would need to be checked against the Mt Maunganui Service Centre operational limits. GBCW can provide evidence of an Air Quality expert to demonstrate the effects of discharges to air of cement dust, that standards can be set at appropriate levels for permitted activities, and that the mitigation systems and their operating procedures are well able to meet them.

It may not be necessary to have a specific permitted activity enabling policy for GBCW cement handling and storage operations, such as there is for open burning, solid fuel burners, and agricultural spraying, if the policy AQ P 1 is applied to identify that bulk cement handling and storage, and the ancillary activities at the GBCW Mt Maunganui Service Centre, can be permitted activities provided that the discharge is suitably managed with general conditions to avoid, remedy or mitigate any adverse effects of the discharge. There would need to be a new rule, specifying the discharge standards to manage discharge effects.

Alternatively, there should be a new policy added, providing for specific industrial and trade premises' discharges to air as permitted activities provided that permitted activity conditions are met. The permitted activity conditions should be detailed in a new rule, for each type of industrial and trade activity where such standards are possible and where the effectiveness of mitigations is known. Such an approach would replace the need for many air discharge consents, by setting clear thresholds of acceptable effects for permitted activities.

Bulk cement handling and storage is one example where industry practice is to contain the dust, which is not a waste by-product but the actual valuable building product itself. GBCW has no wish to broadcast this valuable product, and would rather sell it to users. There would be potential significant adverse effects on the environment, health and amenity values if the cement dust were not removed from the discharge to air. Cement is a highly alkaline substance, eco-toxic in aquatic ecosystems, can burn skin when water is added if it is not cleaned off, should not be inhaled, and can coat surrounding buildings and other surfaces if not controlled. It would be readily apparent through complaints and appearance if GBCW was not able to effectively manage the effects of discharges to air.

Summary

The bulk handling and storage of cement, which arrives in Mt Maunganui by ship, and which needs to be located within this coastal environment, unloading from ship to silo, transferred to bulk road tankers, and dispatched by truck to users:

- Is a port-related activity, being a cargo handling and bulk storage activity, making the product available for onward transport;
- Is a key contributor to the regional construction activity;
- Needs to be located within the Port of Tauranga coastal environment;

- Is a part of the regionally significant port infrastructure (Bay of Plenty Regional Policy Statement), for cargo handling and storage;
- Is already established in the Port of Tauranga coastal environment;
- Has a discharge consent for discharge to air, which expires 31 May 2024, which contains conditions amenable to being permitted activity rules;
- Can (and does) have its potential adverse effects avoided, remedied and mitigated to a less than minor level of effect, by means of the existing operation using baghouses to capture cement dust and particulate matter;
- Would be appropriately managed by permitted activity standards, either setting out the conditions of the consent or using more generic cement handling conditions as used in the Auckland Unitary Plan – Operative in Part;
- Requires more explicit statement of permitted activity status in Policy AQ P1 and / or and in a new rule AQ RX stating the conditions of the permitted activity.

GBCW makes the following submissions:

1. GBCW supports the proposed objectives and policies for air quality, provided that the GBCW Mt Maunganu Service Centre operations are classified as a permitted activity, with permitted activity rules setting standards to be met to ensure no adverse effect is minor or more than minor, as follows:
(new rule)

AQ RX

At Port of Tauranga, Mount Maunganu, the discharge of contaminants to air from cement storage, handling, redistribution or packaging, and associated fly ash and microsilica, is a permitted activity provided the following conditions are complied with:

- (1) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the subject property or into any water body.
- (2) Cement is stored in fully enclosed silos that must be fitted with a filtration system with a filter surface area of at least 24m².
- (3) There must be no visible discharges of dust.
- (4) Cement, must be delivered, from ship to silo and from silo to truck, via a fully enclosed system. Cement additives, such as microsilica, microsilica fume and fly ash, must only be de-bagged and bagged within an enclosed structure fitted with dust control equipment.
- (5) Silos must either have an automated remote filling system or be fitted with a high level alarm that has both an audible and visual indicator and when the alarm is triggered it will stop the filling of the silo.

GBCW does not ask for specific mention of the activity by company name or individual site location, as that could be interpreted as a trade competition matter. The operations must occur at a Port, as the cement arrives by specialised bulk cement carrier ship.

2. Alternatively, there should be an additional policy, enabling discharges to air from industrial and trade activities as permitted activities, where their potential effects are known and mitigations can demonstrate that effects are managed to specified acceptable levels. The rule would list the industrial and trade activities, and the conditions they would be required to meet to be permitted activities. This approach would work for cement handling and storage, where the processes are internalised and the air discharge is filtered. However, longer term management of cumulative effects within a broader dynamic airshed may not allow a fixed allocation of discharges to air, for other activities which cannot contain their effects.
3. Alternatively, Policy AQ P1 should be qualified to permit discharges to air from industrial and trade premises where permitted activity conditions are met, accompanied by a new rule listing the known industrial and trade activities and identifying their industry specific discharge conditions, including (new rule) AQ RX for cement handling and storage as proposed above.