Bronwyn Auckram

From: Courtney Keen on behalf of Facility Manager
Sent: Tuesday, 11 October 2016 3:36 p.m.
To: Bronwyn Auckram
Subject: FW: APP-20168843: Submission on discharge permit from Invercargill Council to discharge water and contaminants into surface water bodies from reticulated stormwater systems.
Attachments: NZSteel final submission on Invercargill consent application.pdf

From: Coyle, Troy [mailto:Troy.Coyle@bluescopesteel.com]
Sent: Tuesday, 11 October 2016 1:22 p.m.
To: Facility Manager
Cc: service@icc.govt.nz; Dwyer, Pat PN
Subject: APP-20168843: Submission on discharge permit from Invercargill Council to discharge water and contaminants into surface water bodies from reticulated stormwater systems.

To Whom It May Concern,

Thankyou for this opportunity to comment on the above application from Invercargill City Council (please note email CC to ICC). Please find attached a submission from New Zealand Steel.

Please feel free to contact me if further information is required or if there are any issues with the document.

Regards
Troy

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Dr Troy Coyle | Manager of Innovation and Product Development
New Zealand Steel
BlueScope Australia and New Zealand
P +64 9 375 8875 | **M** +64 (0) 21 994323
E troy.coyle@bluescopesteel.com **W** www.bluescope.com
A Private Bag 92121 | Auckland 1142 | New Zealand

APP-20168843: Submission on discharge permit from Invercargill Council to discharge water and contaminants into surface water bodies from reticulated stormwater systems.

To:	The Chief Executive Private Bag 90116 DX20175 Invercargill Environment Southland service@es.govt.nz
Name of submitter:	New Zealand Steel Limited (NZ Steel)
Address:	Mission Bush Road Glenbrook Private Bag 92121 AUCKLAND 1142
Contact Person:	Dr Troy Coyle (09) 375 8875 Troy.Coyle@bluescopesteel.com

1 *Summary*

This submission is in relation to an application from the Invercargill City Council (APP-20168843) for a discharge permit to discharge water and contaminants into surface water bodies from reticulated stormwater systems.

NZ Steel is a major supplier of roofing products and has specific concerns regarding the classification of its products in relation to stormwater and contaminants. NZ Steel produces a range of zinc/aluminium coated roofing and cladding products which, since 1994, have essentially replaced traditional galvanised products in the marketplace. These have reduced zinc loads from roofs by approximately 90% on a unit area basis. As a result, storm water quality with respect to zinc has improved, and continues to improve. Such products should not be 'punished' when they have resulted in environmental improvements.

NZ Steel opposes the parts of the application that have implications for the use of roofing materials made by NZ Steel and the compliance costs for developers and home owners in relation to stormwater discharges if they utilise these products.

Rather than focusing on painted or unpainted product performance, any restrictions on roofing material should focus on the Z and ZM categories as identified in Australian Standard AS1397-2011, which are known to contribute to zinc runoff rates much more significantly than the AZ and AM categories. It is the substrate type, and not the painted or unpainted condition, that is the key influencing factor for long-term zinc runoff. We note that roofing is only one of many contributors to zinc runoff, others include roads, which have not been considered in this submission.

NZ Steel wishes to have the opportunity to be involved in any pre-hearing meetings, to ensure that: 1) the company's technical knowledge is utilised and 2) the consent does not result in additional cost implications for clients of NZ Steel or, potentially unnecessarily preventing NZ Steel products from being used in the building and construction industry. NZ Steel also wishes to have the opportunity to be heard in support of our application.

2 *The reasons for making our submission are:*

2.1 Background

NZ Steel manufactures a range of products that include COLORSTEEL® pre-painted steel products, ZINCALUME® steel, and GALVSTEEL®. New Zealand Steel's roofing materials, such as ZINCALUME® steel and COLORSTEEL® pre-painted steel range of products, minimise the occurrence of zinc in roof run-off in stormwater. NZ Steel is actively working to ensure good quality research is conducted into the sources and environmental effects of zinc in waterways, and ensuring misconceptions are corrected through market education.

GALVSTEEL® is the name for NZ Steel's continuously hot-dipped galvanised steel products, which are available in a variety of widths, gauges and mechanical grades. NZ Steel introduced ZINCALUME®, zinc/aluminium alloy coated steel, to the New Zealand market in 1994. ZINCALUME® steel represents a significant improvement on the traditional zinc coated galvanised steel. Since its introduction, ZINCALUME® steel has been widely accepted and has the major share of the steel building products market. ZINCALUME® steel is produced by a continuous hot dip process similar to that used to manufacture galvanised steel. While both ZINCALUME® steel and galvanised steel products have a steel base, galvanised steel has a coating of 100% zinc, whereas ZINCALUME® steel has an alloy coating of 43.5% zinc, 55% aluminium and 1.5% silicon. ZINCALUME® steel conforms to AS1397:2011.

The COLORSTEEL® Endura® and COLORSTEEL® Maxx® paint system consists of a ZINCALUME® steel or GALVSTEEL® substrate to which a prepainted finish system is applied. The system is designed to provide protection against corrosion in areas where moderate to severe environmental conditions are experienced. COLORSTEEL® Endura® and Maxx® product are suitable for a wide range of rollformed roof and wall claddings, rainwater accessories and general building products. The COLORSTEEL® pre-painted steel paint system will exceed the service life of most traditional post painted systems.

The COLORSTEEL® Endura® and Maxx® pre-painted steel ZINCALUME® substrate is steel strip, commonly 0.40 mm or 0.55 mm thick and coated with a 45% zinc, 55% aluminium alloy to a nominal coating mass of 150 or 200g/m2 manufactured in accordance to AS1397:2011. A range of thicknesses, widths and strengths are available. Following pre-treatment, a corrosion inhibitive primer and top coat are applied to the outer surface and a corrosion inhibitive primer and a backer to the reverse side. These coatings are oven cured to provide colour and corrosion performance.

As the manufacturer and supplier of the above products to the building industry, NZ Steel is concerned about how the global discharge consent will be monitored and managed if granted, specifically in relation to management of metals from roofing materials.

2.2 Concerns

- NZ Steel supports in principle the over-arching objective to reduce metal discharges to water. However, any conditions of consent that form part of a consent if granted, and associated management plans, must be workable in relation to the existing environment in Invercargill and with available products in the marketplace. The development and implementation of these plans as part of the consent requirements could have direct implications for NZ Steel in relation to the supply of roofing materials. Specifically, NZ Steel is concerned that such plans could preclude the use of new or recently developed zinc-coated building products that release significantly less zinc to the environment than older products. The use of such products has been shown to have resulted in reductions in environmental zinc concentrations in other regions (*e.g.* Auckland) over the last 22 years.
- Table 5.2 mentions "*Source control thorough (sic) treatment of roofs and other sources could be considered*". As the largest supplier of roofing material to the city, NZ Steel considers it to be critical that it has input into the development of any conditions as they relate to control of source control systems for runoff of metals from roofing.NZ Steel considers that the Council as consent holder must work with stakeholders such as NZ Steel, and potentially architects and designers, in determining these concentration levels. NZ Steel has undertaken a significant body of research on this topic and considers the Council would benefit from its input and technical knowledge to ensure a workable system that does not result in landowners being unable to comply with the network discharge consent and being forced to obtain their own discharge consents from the regional council for what would be considered ordinary land use activities.
- There is a lack of assessment of costs and benefits of the conditions proposed with the application. For example there is no assessment of the additional cost of stormwater treatment that could be imposed on private land owners and users of the products, or the additional building costs imposed on the market (of having to use a more expensive product).
- The consent could result in significant risk to NZ Steel's business and could have a direct economic impact on the local, regional and national economy, if the conditions effectively require that low-cost building products be substituted for higher cost building products.
- NZ Steel's own extensive research suggests that the environmental benefits arising from the targets desired by the consent could be minimal, given the substitution of older galvanised products with ZINCALUME® steel COLORSTEEL® pre-painted steel, since they were introduced to the market in 1994 (in the absence of any plan rules or consent conditions requiring this).

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- The requirements have the potential to impose significant additional costs on construction, either by encouraging specification of a more expensive coated product, or requiring the installation of a stormwater treatment facility/source control systems.

    - Stormwater treatment facilities potentially require significant additional land area to be provided (*e.g.* wetlands, swales and ponds) to treat run off from areas of roofing, spouting, cladding or architectural features. This would result in an inefficient use of land for little or no environmental benefit, and is a significant concern for a City that is already constrained in land area available for development and use.

    - Requiring the market to use more expensive products will affect the cost of building, when affordability is a significant concern already.

    - Overall, any additional cost is a significant concern to NZ Steel, both from a commercial perspective, but also from a social and community perspective. The New Zealand community should not be asked to accommodate additional costs where there is an unknown or nil environmental gain to be had.

3 *We wish the consent authority to make the following decision:*

- NZ Steel requests that controls are considered in relation to known data around zinc runoff levels according to substrate type (as defined in Australian Standard 1397-2011), rather than inferring that painted product is necessarily superior to unpainted product. The categories that are known to yield the highest zinc loads to stormwater are Type Z (which includes unpainted GALVSTEEL), ZM and, to a lesser extent, Type ZF. NZ Steel considers that painted GALVSTEEL and unpainted ZINCALUME® steel have comparable zinc runoff rates, which are an order of magnitude less than unpainted GALVSTEEL (*i.e.* unpainted category Z in Australian Standard 1397-2011).
- Include NZ Steel in the process of formulation of water quality trigger values, and utilise the extensive body of data that NZ Steel has on the topic to ensure a workable set of parameters.

NZ Steel wishes to be heard in support of its submission.

If others make a similar submission, NZ Steel will consider presenting a joint case with them at the hearing.

NZ Steel does not consider it can gain an advantage in trade competition through this submission.

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(Signature of person authorised to sign on behalf of NZ Steel)

.....11 October 2016

Date

Title and address for service of person making submission:

New Zealand Steel Limited

Attention: Dr Troy Coyle

Address: 131 Mission Bush Road
Glenbrook
Private Bag 92121
AUCKLAND 1142