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8<sup>th</sup> February 2016

Mr Roman Maevsky  
Case Manager  
Dumping Operations 2  
Anti-Dumping Commission  
Level 35, 55 Collins Street  
Melbourne Victoria 3000

### Public File

Dear Mr Maevsky

**Re: Anti-Circumvention Inquiry No. 290 and 298 – Zinc coated (galvanised) steel exported from Taiwan, Korea and P R China – Comments re Expert Advice**

#### Introduction

BlueScope Steel Limited (“BSL”) has reviewed the recent report provided to the Anti-Dumping Commission (“the Commission”) by Emeritus Professor Druce Dunne of the University of Wollongong and seeks to provide clarification concerning elements of the advice provided.

At the recent meeting of 21 January 2016 with Commission officials, representatives from BSL and Austube Mills Pty Ltd (“ATM”) provided positive feedback regarding the metallurgical advice obtained by the Commission from Emeritus Professor Druce Dunne.

#### Independent Report

The independent report confirmed earlier submissions made by BSL in regards to the addition of the alloying element Boron to levels above the 0.0008% minimum as having no appreciable effect on the general mechanical properties of galvanised steel. Specifically, it is noted at Section 8 of Emeritus Professor Dunne’s report that Boron additions without consequent heat treatment (Q&T) is counterproductive and does not increase the steel’s strength in the absence of this heat treatment process. Emeritus Professor Dunne’s comments reflect this key point:

“For normal structural steel applications, there is little need to use a hardenable alloy steel to boost the strength level. **Boron in solute form in ferrite exerts no significant strengthening effect [16] and therefore the addition of B with no heat treatment, other than that locally imposed by welding, is likely to be counterproductive**, especially if its presence in the steel is undeclared or is poorly quantified. Alloying with boron is only a valid strategy if it leads to a verifiable improvement in the properties of the steel. This is unlikely to be the case for low C structural steels of moderate strength levels (yield strengths of 250-350 MPa), which exhibit excellent ductility and weldability. **Addition of boron will not increase the strength unless a QT type heat treatment is applied [16]**, but it is likely to increase the potential for weldment cracking by promoting the formation of martensite in the HAZ. If the dangers of B-alloying are recognised, counteractive welding procedures can be employed, but these will probably add to manufacturing costs.” (*emphasis added*).

The independent advice confirms that the addition of the boron in galvanised steels (and HSS) does little to enhance the strength qualities of the steel unless the steel is subjected to further QT heat treatment.

It is further noted in Emeritus Professor Dunne's specific responses to the questions of the Commission at Section 9 of the report that the addition of boron has "no appreciable effect" of the steel unless further QT heat treatment follows (which is not normal practice for galvanized steel). Specifically, the Emeritus Professor's comments of each discussion point confirm this key observation at Section 9 of the Report as follows:

- "1. ***The addition of B to HSS and galvanized sheet/plate products that are nominally low carbon structural steels would have no appreciable effect on the general mechanical properties of the steels unless they were subjected to a heat treatment that would allow the hardenability-promoting effect of B to come into play.*** In such a case the strength would be significantly increased with accompanying decrease in ductility/formability. ***However, QT heat treatment is not a normal practice for these types of steels.*** Whether heat treated or not, the presence of boron could adversely affect the localised HAZ microstructure and properties produced as a result of welding" (*emphasis added*).

BSL submits to the Commission that there is a simple explanation as to why the galvanised steel is not subjected to the above mentioned further Q&T heat treatment process. The galvanised steel coating is comprised of 99.9% zinc, and zinc has a melting temperature of 419.5 degrees Celsius. Heat treatment (Q&T) temperatures start at 850 degrees Celsius, and as such the zinc coating would be destroyed by exposure to such high (Q&T) temperatures. Q&T heat treatment is generally confined to uncoated steels such as Hot Rolled Sheet and plate steel (as referenced in section 7 Types of B-alloyed steels – Bisplate 80 or EM812 plate steels).

It is therefore inaccurate and patently incorrect to justify the addition of boron to galvanised steels (or HSS) on the grounds that such additions make an appreciable effect on the general mechanical properties.

### Conclusion

It is clear from the independent report that the simple addition of minor alloys such as Boron at greater than 0.0008% to galvanised steel has no effect on the properties of galvanised steel. The Commission has found that the imported minor modified alloyed galvanised steel is made by the same manufacturing process, is sold into the same channels and used in the same end uses as the traditionally supplied non-alloyed galvanised steel.

The only conclusion that may be drawn from the facts before the Commission is that the addition of minor modification alloys such as Boron (and other alloys such as Chromium and Titanium referenced in Table 1 of Professor Dunne's report) above the 'boundary values' is clearly a deliberate strategy to reclassify the product to the 'other alloy' tariff codes. This strategy has been purposely exploited by parties in order to circumvent measures that had been imposed on these goods by the Minister.

Such a deliberate and immediate circumvention activity initiated following the imposition of measures by the Minister, supported by industry press over a long time period referring to minor modification as being the circumvention strategy of choice for the world's steelmakers, renders any argument by importers that they were not aware or ignorant that the importation of minor modified steel was a circumvention activity, invalid.

The conclusions contained in the independent report confirm the Commission's intention to impose amended measures on goods including alloys from the date of initiation of the anti-circumvention application.

BSL further affirms with the Commission its request for the amended notices to reflect “whether or not including alloys” to ensure importers do not seek out future circumvention opportunities involving alloys other than boron, as already circulating in the industry press.

If you have any questions concerning this letter please do not hesitate to contact me on (02) 4275 3859.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Alan Gibbs". The signature is fluid and cursive, with the first name "Alan" and last name "Gibbs" clearly distinguishable.

Alan Gibbs  
Development Manager – International Trade Affairs