

[REDACTED]

From: Andrew Helps [REDACTED]
Sent: Thursday, 13 May 2021 11:23 AM
To: Amy Selvaraj (DELWP)
Subject: Coffey Technical note: Health Risk evaluation of metals/mettaloids

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Amy,

I have just been looking at the above referenced document.

On page 6 Item 4 last para it is stated "Titanium and Bismuth were not quantitatively assessed due to a lack of sufficient toxicity data".

This statement is not correct.

The correct data is available and here it is:

The ATSDR Substance Priority list provides detail for Titanium at line 313, CAS Registry number 7440-32-6. The water GMMC (mg/L) 2.25872 mg/L Air at 0.00008 mg/m³ and a TDD (Theoretical Daily Dose) (70kg fit healthy male) of 2.27169 mg/day.

The air limit for Titanium should be compared to Arsenic (CAS number 7440-38-2) where the air limit is 0.00007 mg/m³, Water GMMC is 0.06053 mg/L and the TDD (70kg fit healthy male) is 0.071300 mg/day.

The toxicology for Bismuth is contained at pages 657 to 666 of Volume 2 of the Handbook of the Toxicology of Metals, (Nordberg Et Al). The critical issue is that Bismuth in the human system is capable of penetrating the placenta. It also can create in humans Colitis, gastrointestinal bleeding, purpura, agranulocytosis and aplastic anemia.

Could you please pass this data to Coffey and ask them to incorporate this data in a revised version of their technical note and re issue the document.

Kindest regards

Andrew Helps

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常务董事

Mobile [REDACTED]

UNEP Global Mercury Partnership

Waste Management Partnership - designated expert

Mercury added products and alternatives – designated expert

Mercury Fate and Transport Group

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