

From: McLellan, Clif
Sent: Wednesday, March 24, 2010 5:49 AM
To: Austin Kerr
Subject: RE: questions about health risk standards for MTBE in drinking water

Austin

Austin

When a chemical such as MTBE is reasonably anticipated to be a carcinogenic risk to humans, only a cancer risk level is calculated by NSF International for the chemical. The Total Allowable Concentration (TAC) then represents the 10×10^{-5} risk level (or the level at which one tumor out of 100,000 people would result). While NSF International did not perform a quantitative assessment of non-cancer risk, the cancer risk level derived is protective of potential non-cancer effects as well. This is due to the different methodology employed to estimate non-cancer risks compared to cancer risks, with the methodology for estimating cancer risk being more conservative than for non-cancer risk. While NSF did not explicitly state in the document that the cancer risk level derived for MTBE is also protective of non-cancer risk, it is generally accepted in the risk assessment community that cancer risk levels are protective of non-cancer risk as well, again owing to differences in methodology used to calculate cancer risks. A STEL is not derived for any chemical considered to be a carcinogen because there is no level of exposure which is considered to be without cancer risk. Therefore, setting a STEL at a level above the 10×10^{-5} risk level (one tumor out of 100,000 people) can not be justified.

I have previously offered to go through the process to calculate a non-cancer level. and then the comparison would be more direct. This removes the issue of whether the non-cancer number would be higher because there would be a direct comparison.

Let me know if you have more questions.

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From: Austin Kerr [mailto:austin.kerr@ascentenvinc.com]
Sent: Tuesday, March 23, 2010 6:47 PM
To: McLellan, Clif
Subject: questions about health risk standards for MTBE in drinking water

Cliff,

I am working with Sydney Coatsworth, also at Ascent Environmental, and the attorneys at Remmy Thomas Moose and Manley who are representing the California Buildings Standards Commission in their preparation of the Second Revised Draft Environmental Impact Report for the Adoption of Statewide Regulations Allowing the Use of PEX Tubing.

I'm writing to clarify some notes Sydney took during a meeting she and you attended on December 17, 2009. I think Whit Manley and Kelly Taber were also present.

The standard used in NSF/ANSI's Standard 61 Protocol for MTBE is $100 \mu\text{g/L}$ (or 0.1 mg/L). Is this protective of both cancer risk and non-cancer risk?

According to notes Sydney took from the meeting, the 2008 Oral Risk Assessment by NSF (attached) explains that the reference standard used for cancer risk is also protective of non-cancer risk. Would you be able to help me specify where this is explained in this document? Perhaps the paragraph that begins with “Based on critical review...” on page 49 or the paragraph that begins with “However, recognizing...” on page 59?

Also, is there a short-term exposure level that has been established for MTBE in drinking water? Or is there a reason that there is no established short-term exposure level for MTBE in drinking water?

Please do not hesitate to give me a call if you were prefer to discuss these questions by phone.

Thanks,
Austin Kerr

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