

Green Chemistry Work Group Conference Call

Meeting Notes
January 24, 2019

Attendees:

Adriane Borgias, Karl Rains and Saskia VanBergen – Department of Ecology
Lauren Heine, Ph.D. – Northwest Green Chemistry
Jay West – American Chemistry Council
Ben Floyd – White Bluffs Consulting
Joel Breems - Avista
Lisa Dally Wilson – Dally Environmental and SRSP
Vikki Barthels – Spokane Regional Health District
Rob Lindsay – Spokane County
David Darling – American Coatings Association

The purpose of the call was to discuss the draft TiO₂ memo prepared by Northwest Green Chemistry (NGC), as well as other Green Chemistry activities scheduled for completion between now and June 30, 2019.

After introductions, Lauren Heine summarized the draft TiO₂ memo and some comments/responses already received.

Memo Summary/Discussion:

- The purpose of the white paper was to learn more about the production process of titanium dioxide (TiO₂) and its potential to produce inadvertent PCBs (iPCBs) that could end up in consumer and industrial products, and ultimately the Spokane River.
- NGC conducted a scientific literature review and interviewed industry experts from 3 of the top 5 global TiO₂ manufacturers/vendors.
- Approximately 20% of the 6.6M tons of pigmentary TiO₂ produced annually are manufactured in the US, predominately using a chloride process (>60% of global production uses this process).
- Manufacturers interviewed indicated that they do not test for PCBs in their TiO₂ product because they do not expect to find them, as they believe the very high temperatures used in the production process would destroy any iPCBs.
- An anonymous US purchaser of pigmentary TiO₂ tested 2 batches of raw TiO₂ powder for PCBs using EPA Method 1668C; both of which were found to contain 0.085 ppm (85 ppb) of PCBs.
- The memo recommends testing both pigmentary and ultrafine (nano; approximately 1% of production) TiO₂ for iPCBs to confirm if, and how much, iPCBs are produced using the chloride process.
- Lauren presented the findings of the memo to the TSCA WG and has received comments for various minor revisions to the memo; Lauren requested any additional comments from the GC WG.
- Lauren and Doug are scheduled to present to the Sustainable Packaging Coalition Leadership Team on 2/13/2019 to inform them of the PCB issues.
- Jay West indicated that the Alliance of Chemical Associations (ACA) concurred with the ACC comments to the memo; among other comments to the memo, Jay requested a source document referred to in a 2012 ppt presentation by Lisa Rodenburg (see comment #8 from Jay's email dated 1/18/2019).
- The WG discussed the gap between what is used in consumer products versus the pathway/release potential to the river.

- There was discussion amongst the WG with respect to the WG's recommendation of approving the memo versus recommending to the Task Force that we move forward with the recommendations presented in the memo (sounds as confusing as the discussion itself☺).

Next Steps:

- Ecology to provide the source document per Jay West's request (complete).
- Ecology to prepare Recommendation of next steps.
- Lauren to provide a summary of comments matrix.
- Lauren to make revisions to the memo and redistribute for final approval.

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