UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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WASHINGTON, DC 20460

OFFICE OF
RESEARCH AND DEVELOPMENT

February 1, 2016

William J. Adams, Ph.D, SETAC Fellow
Chair, Arsenic Science Task Force

Subject: Response to the Arsenic Science Task Force concerns regarding the Health and Environmental Research Online (HERO) database

Dear Dr. Adams:

Thank you for your response to our May 6, 2016 letter and for your interest in the IRIS inorganic arsenic assessment. I hope the information below will address your concerns with the sorting, screening, and selection processes.

With regards to the articles on arsine gas (Blair et al., 1990; Hong et al., 1989) and gallium arsenide (Omura et al., 1996), these articles are currently tagged under the category of "other potentially supporting studies." These articles are not directly relevant to hazard identification, but were retained in this category as potentially informative studies. The studies on arsenic metabolism and kinetics that you refer to are not missing from the studies being considered. They can be found under "mode of action screening process" or "susceptibility screening process." We have been working on elaborating the public LitFlow diagram to include more details. If you go to the page now, you will be able to access four interlocking LitFlow diagrams, i.e. overview, hazard identification screening process, mode of action screening process, and susceptibility screening process. We hope this will provide clarity on what literature is being considered relative to each topic. Again, as the arsenic assessment progresses, minor modifications may be made to these diagrams as our understanding evolves.

The *IRIS Toxicological Review of Inorganic Arsenic* is relying on peer-reviewed, published, primary source materials, as is generally consistent with the standard of practice in science. Reviews and commentaries are routinely excluded from extensive consideration in the Toxicological Review.
These criteria are documented in the Assessment Development Plan (2015). Meta-analyses are being considered in the Toxicological Review for hazard identification if they contain original, peer-reviewed analyses.

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As described in the Assessment Development Plan (2015), potential risk of bias was evaluated using an approach developed by the Office of Health Assessment and Translation (OHAT) at the National Institute of Environmental Health Sciences (NIEHS). This evaluation was done after screening of studies for relevancy and is not reflected in HERO. HERO is a database that captures the literature search and screening.

Hopefully the information provided here addresses your concerns and clarifies our process. Please feel free to contact us if you have additional concerns or suggestions.

Sincerely,

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