

National Aeronautics and Space Administration (NASA) Comments on the Interagency Science Discussion Draft IRIS assessment of Libby Amphibole Asbestos (dated August 2014)

Date: August 28, 2014

NASA thanks EPA for the opportunity to review and comment on the draft IRIS assessment of Libby Amphibole Asbestos. Our comments are provided below.

Based on previous reviews, NASA strongly encouraged EPA to address the technical and scientific issues identified by NIOSH, considered to be the lead federal agency in the study of the impact of asbestos exposure. NASA again requests clarification of response to the lengthy and detailed NIOSH technical comments. This approach was suggested as a positive collaboration between federal agencies but current review does not clearly link the NIOSH input with EPA's response in this draft.

We are also unable to identify how this draft reflects the more general NAS recommendations and question the lack of a robust peer review of EPA's newly proposed meta-analysis. NASA welcomed the NAS recommendations for improvements to IRIS and are concerned that this draft does not adequately reflect the NAS issues for transparency and peer review.

EPA's plan to consider Libby Amphibole as an index chemical for all asbestos is simply not supported in the range of studies that link adverse effects to specific composition and configuration of the individual asbestos fibers. Libby Amphibole does not adequately reflect that range of impacts and does not serve as an index for the larger family of asbestos fibers present in the environment.

NASA also continues to question EPA's reliance on the studies and the emphasis on plueral plaques, not documented conclusively as an adverse effect. EPA received significant questions on this choice of a normal and not proven adverse effect. Despite the lack of an adverse effect, EPA utilizes UF (Uncertainty Factors) which do not appear to be justified. For example, EPA's use of a Subchronic UF is not justified as the critical study cited was 18 years long and of sufficient duration to address subchronic exposures.

NASA identified continuing concerns over the use of UFs and the lack of a demonstrated adverse effect. We request that EPA revisit this draft to address these outstanding issues prior to moving to the next step in the IRIS Assessment process.

NASA thanks EPA for the opportunity to review and comment on this draft.