

Testimony for the Public Meeting on 1-Bromopropane
Comments by Gary E. Timm
September 30, 2020

Good morning. My name is Gary Timm. I served as Chief of the Chemical Testing Branch for 10 years. Today I am presenting comments on behalf of the Environmental Protection Network. EPN is an organization comprised of over 500 EPA alumni who volunteer their time to protect the integrity of the U.S. Environmental Protection Agency (EPA), human health, and the environment.

EPN submitted comments on the 1-bromopropane (1-BP) draft risk evaluation on August 30, 2019. EPA has failed to address our substantive comments and has not given an adequate explanation for not doing so. By failing to use appropriate methods in various areas of its risk evaluation, EPA is underestimating the risk of 1-BP.

As EPN noted before, the agency is not using the best available tools by continuing to use the non-peer-reviewed, flawed draft guidance document entitled “Application of Systematic Review in TSCA Risk Evaluations” to identify, sort, select, and exclude studies and other information to be used in the risk evaluation and, then, to grade their quality and acceptability for inclusion in the assessment. The Science Advisory Committee on Chemicals (SACC) review of the 1-BP chemical risk evaluation pointed out that the use of the Toxic Substances Control Act (TSCA) systematic review process resulted in EPA failing to consider well-done studies. EPA must develop guidance that comports with standard practices. That is consistent with the recommendations received during the peer review currently underway by the National Academies of Sciences. Until EPA develops a new systematic review process, the Integrated Risk Information System (IRIS) systematic review process, Office of Health Assessment and Translation (OHAT) or Navigation Guide should be used in place of the flawed TSCA systematic review process.

In the final risk evaluation of 1-BP, EPA correctly notes that it must consider aggregate exposure, that is co-exposures from different pathways, as required by section 6(b)(4)(F) of TSCA. However, the agency then failed to do so, stating that it could not consider aggregate exposure because it did not have a Physiologically-Based Pharmacokinetic (PBPK) model for integrating exposures from the dermal and inhalation routes. This is a feeble excuse, as the agency has managed successfully to conduct thousands of aggregate exposure assessments without benefit of a PBPK model as a component of the risk assessments for food-use pesticides and other chemicals over the course of the past 30-plus years. The failure to include aggregate exposures may result in a substantial underestimation of exposure to workers and consumers who come in contact with 1-BP.

On October 18, 2019, EPN sent EPA a letter expressing our concern that EPA was taking too long to regulate serious acute effects from exposure to 1-BP. The draft evaluation concluded that 1-BP presents an unreasonable risk to workers and consumers for developmental and reproductive toxicity from acute exposure. We noted that this finding was unlikely to change in the final risk evaluation. This is alarming

because women of childbearing age comprise half of the large population of consumers, by-standers, and workers that are exposed to 1-BP, and a single acute exposure during a critical window of development could cause irreversible, permanent damage to a developing fetus. We suggested that EPA regulate 1-BP in two phases. The first phase would move quickly to address the acute effects. A subsequent rulemaking would address chronic effects and any other effects not addressed in the first phase. This suggestion was rejected by EPA. To underscore this point, EPA specifically notes in the final risk evaluation that even now it is not making an imminently hazardous finding under section 7 of TSCA. If an acute exposure that causes developmental and neurological effects does not qualify for making an imminent hazard finding, what does?

In the final risk evaluation, EPA determined that 1-BP presents an unreasonable risk from inhalation and dermal exposure to consumers and workers who use 1-BP in dry cleaning solvents, spot cleaners and stain removers, sealants and adhesives, and to occupational non-users and bystanders near these operations. As with EPA's risk evaluation regarding HCBP, EPA should not rely on the use of personal protective equipment (PPE) in these uses. Assuming that workers will use PPE for the entire duration of the work activity throughout their careers, even when such equipment is not required, provided, or used, underestimates the risk to workers.

We urge EPA to ban all consumer and industrial/commercial uses of 1-BP for cleaning and degreasing, use in adhesives and sealants, and dry-cleaning solvents.

Thank you for your attention this morning.