March 7, 2021

Dear [County Health Official/Vector Control Manager],

The Arizona Department of Environmental Quality (ADEQ) is reaching out to provide information and resources regarding the emerging issue with per and polyfluorinated substances (PFAS) from fluorinated high density polyethylene (FHDPE) containers used to store a mosquito pesticide (and other chemicals). PFAS are a group of chemicals that are linked to adverse human health outcomes from exposure. Some studies have shown that exposure to certain PFAS may increase the risk of cancer, affect the immune system and impact children's development, and additional research is ongoing.

In its press release dated March 5, 2021, the U. S. Environmental Protection Agency (EPA) stated that eight different PFAS with levels ranging from 20 - 50 parts per billion were detected in the pesticide product stored and transported in FHDPE containers. EPA's testing has shown that the PFAS were most likely formed from a chemical reaction during the container fluorination process which then leached into the pesticide product. PFAS concentrations have been detected in both the pesticide product and in unused FHDPE containers.

Research is ongoing and no one is certain of health impacts, but EPA says "the data indicates that the amount of PFAS that has entered the environment from the contamination in the containers the agency tested is extremely small." EPA further stated that it "is aware that many companies are using fluorinated HDPE containers to store and distribute pesticide and other products." EPA is actively working with the Food and Drug Administration, the U.S. Department of Agriculture and industry and trade organizations to raise awareness of this emerging issue and discuss expectations of product stewardship.

Continuing to protect Arizonans and Arizona’s environment from PFAS impacts is critical. Please review the EPA’s March 2021 Press Release at [https://www.epa.gov/pesticides/pfas-packaging](https://www.epa.gov/pesticides/pfas-packaging). EPA's website encourages state and local mosquito control districts to contact their pesticide supplier if there are questions about the potential for PFAS in pesticide products they have purchased or intend to purchase. In January 2021, EPA released information that identified Anvil 10+10 as one of many products packaged in FHDPE containers. To minimize risks to public health and the environment, ADEQ is requesting that mosquito control personnel discontinue use of Anvil 10+10 and contact the manufacturer about their product exchange program.

ADEQ has prepared an online resource about current scientific, regulatory and legal developments related to PFAS. ADEQ’s online “PFAS Resources” includes links to PFAS information to support your decision-making about products purchasing so that potential impacts to human health and the environment can be minimized. “PFAS Resources” is located at: [https://www.azdeq.gov/pfas-resources](https://www.azdeq.gov/pfas-resources).

Understanding and mitigating the potential risks associated with the use of pesticides containing PFAS is prudent. We strongly recommend that health departments and vector control personnel carefully review and consider this information to better understand the risks and potential consequences of continued use of pesticides containing PFAS and continue to pursue updates in understanding potential impacts to other product lines as yet undiscovered. For questions about ADEQ's online PFAS Resources or additional information, please contact Paula Panzino, ADEQ Chief Science Officer at panzino.paula@azdeq.gov.

Sincerely,

Laura Malone  
ADEQ Waste Programs Division Director