



## Testimony presented to the Joint Committee on Administrative Rules

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Good afternoon, Mr. Chair and members of the Committee, and thank you for the opportunity to speak with you today.

My name is Anna Reade, I am a scientist with the Natural Resources Defense Council and am the organization's lead scientist on PFAS. I hold a doctorate degree in Developmental Biology from UC, San Francisco.

Independent scientists and authoritative bodies have concluded that PFAS, as a class, pose a serious environmental and public health threat.

PFAS are extremely persistent, can spread quickly through the environment and build up in plants, animals and humans, and are associated with a wide array of harmful health effects including, cancer, immune system suppression, liver and kidney damage, and developmental and reproductive harm.

To Michigan's credit, it has performed the most comprehensive PFAS monitoring in the nation. The results have been alarming, showing that over 100 of the state's public water systems are contaminated with PFAS – affecting almost 2 million of its residents.

In setting drinking water standards, the state is taking an important next step towards protecting its residents from the health risks posed by these dangerous 'forever' chemicals. Two of the standards, for PFOA and PFNA, if adopted, would be the most protective in the nation. This is largely due to certain more health protective choices made by MPART's Science Advisory Workgroup, including the use of drinking water exposure assumptions based on infants and children – to better protect the most vulnerable groups to PFAS exposure.

However, NRDC's review of the science demonstrates that the state should go further to protect public health from PFAS by strengthening the limits for several of the individual PFAS chemicals; establishing a combined limit for the sum of the seven individual PFAS chemicals Michigan is choosing to regulate; and setting a limit for the total amount of all PFAS chemicals allowed in drinking water.

Firstly, some of the health-based values recommended by the MPART's Science Advisory Workgroup are not fully health-protective because they do not adequately address the level of uncertainty in assessing the risk these chemicals pose.

In addition, in August of 2019, California developed health-based values, known as reference levels, for PFOA and PFOS in drinking water based on data from a new National Toxicology Program study not available to MPART's Science Advisory Workgroup at the time of their assessment. A reference level based on increased cancer risk was set at 0.1 ppt in drinking water for PFOA and 0.4 ppt for PFOS.

Perhaps most important is the state's focus on individual PFAS chemicals and a lack of accounting for the similarities amongst the PFAS assessed and for the thousands of other known PFAS - which share hazard properties such as persistence, mobility, bioaccumulation and potential for harm.

The current crisis we are facing demonstrates that individual chemical management is not an effective approach for controlling widespread exposure to this large group of chemicals with known and potential hazards. Moving beyond individual chemical management is critical to properly addressing the unique contamination crisis presented by PFAS. Even if we set standards for seven PFAS chemicals each year, it would take far too many generations to protect residents from the health impacts of these chemicals.

This class-based approach has been taken by other states, like Vermont and Massachusetts. Further still, the EU has proposed to regulate total PFAS standard in three years. This is in agreement with the conclusions made in NRDC's scientific report submitted to the state last year – that the most health protective approach to addressing PFAS in drinking water would be to set a treatment technique that is most effective at cleaning up all known PFAS from drinking water.

In support of these conclusions, I was among the 16 experts on PFAS who recently published an article in Environmental Science & Technology Letters, providing a scientific explanation for why a class-based approach to the thousands of separate but related PFAS chemicals is appropriate and necessary.

We conclude with, quote:

“Without effective risk management action around the entire class of PFAS, these chemicals will continue to accumulate and cause harm to human health and ecosystems for generations to come.”

Thank you again for the opportunity to speak with you today. These standards are an important next step in addressing the PFAS crisis in Michigan and we support their adoption. NRDC's Michigan Senior Policy Advocate, Cyndi Roper, and I look forward to continuing this critical work with legislators, agency staff, and Michigan residents to ensure our drinking water is safe from the harmful effects of PFAS chemicals.