establish the health and environmental consequences of fracking. We need no more studies to establish the health and environmental consequences of fracking, and it doesn't matter whether it's the fracking process itself or the related activities.

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It's all bad. It's all bad, and so as a manufacturer, as a businessman --- and I know you don't often have manufacturers and businessmen to speak here because they're reluctant to speak here, but today I speak. We need to have a ban on any related activity to fracking in the Delaware River Basin Commission. Thank you.

HEARING OFFICER:

Thank you, sir. Harriet Shugarman, and then Bill Shaughnessy and then Ling Tsou. All right. This is Ms. Shugarman. If you would, please, ma'am.

MS. SHUGARMAN:

Thank you. I'm Harriet

Shugarman, the Executive Director of Climate Mama, a national organization with members from all the basin state.

And I'm here also in my capacity as the New York City Chair of the Climate Reality Project.

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I'm an adjunct professor at Brownville College of New Jersey where I teach a senior level course in global climate change policy, and I traveled here from Bergen, New Jersey today.

I will be focusing my remarks on the climate impacts that threaten the basin. The realities that climate change already brings to bear the region must be considered, as must the future climate change impacts as best we can. I'm not sure how closely you've been following the arrival of day zero in Cape Town, South Africa.

Cape Town is a sophisticated city with sustainability programs that serve as models around the world, yet as early as July 9th of

this year, the taps for nearly one million people will be turned off. The drought that has created this near Max Max scenario came seemingly out of nowhere in the last three years.

Providing them water is not an easy task, particularly as we live climate change.

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guardians of our basin are working to arrive at. I know that. With the impacts of climate change ever present, though, anything that threatens the flora and the fauna that rely on the Delaware to survive and the absence of more than 15 million people who live in the basin to the clean and reliable waters of the Delaware must be stopped.

Earlier this week, astonishing scientists, the Arctic recorded temperatures above zero, 45 degrees above normal. It's not an anomaly.

This is something that's happened numerous times over the past

few years. This occurs as we in the northeast are also baking in an unseeingly warm February for the second year in a row. New York City, D.C., Boston and Portland, Maine all set new high temperatures this week, with Pittsburgh breaking a 127-year heat record, hitting 78 degrees yesterday. These types of extremes are happening with more regularity and frequency all around the world.

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This past summer New York magazine published the article, an Uninhabitable Earth. They looked at the worst case scenario of unchecked climate change.

As policy makers, we often use the middle of the standard deviation when assessing possible scenarios. There are no clear settings to tell us how soon or when climate impacts will be catastrophic, but this asks us to look one to two standard deviations away from the norm.

There were push-backs

including from climate scientists, yet we should not use the precautionary principle when considering something as critical as our access to fresh water?

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I am sure that some of you are parents or grandparents, uncles or aunts. Climate change is happening on our watch. Visualize your children as you make these critical and very big decisions. We have seen time and again unexpected and unimaginable scenarios that do occur and we can only control what we can control. You control what happens next.

Anything short of a complete ban on drilling and fracking related activity including water related withdrawal and storage wastewater would be a dereliction of your stated vision and your leadership. Thank you.

HEARING OFFICER:

Thank you. Bill Shaughnessy next, please, then Ling Tsou and then Dyanne Jurin. Okay.