

Raymediation Technical Assistance:

We have achieved the desired production of the refraction systems and the unit to deploy it. We have a dedicated and talented engineering and design team to continue to innovate and upgrade the systems but we still need more research into the process to support implementation. The additional resources we need are in the form of financial support to continue to develop the receiver system to handle PFOA and other contaminants. This includes support for the preparation and testing of promising photocatalysts in our receiver. Our team is also ready to begin scaling our system to 16 feet, providing a four-fold increase in energy. Our customer feedback shows a need for higher efficiency and throughput systems. This will create a larger market for Ray™ and open avenues to remediate additional effluent streams.

Additionally, we need the support of research institutions to run and verify the tests. We have enthusiastic research partners at UNLV and OSU, but their assistance with analytics and testing

comes with a cost. If we are fortunate enough to be awarded the prize, we will use this money to support the testing and analytics necessary to qualify our system for remediation of PFOA and PFAS. We will set up a system at UNLV to support this research with the goal of fully demonstrating destruction of this contaminant. If we are awarded the \$100,000 award, we will use the dollars to support the scaling of the lens to 16 ft. in order to provide more direct exposure for the process. This involves the creation of new tooling to support that production. This system will also be available to run critical trials and gather data that can be used to prove our system as a solution to this problem. Testing will include, verification of process, perfection of catalyst and analytics.

Although we have always thought of solar as an alternative technology, OSU's research on our system has shown that concentrating it for direct application to drive the photocatalytic process is the most efficient and powerful way to set up this reaction. Early tests show that the breakdown of PFAS is possible, but we have been unable to secure the funding to fully develop the system for this process. The Ready! award will pave the way for an entirely new approach to environmental remediation and provide the energy source that can optimize years of research into photocatalysts and millions of dollars in investment into this process.