Supplementary Submission No 48a

INQUIRY INTO INQUIRY INTO PFAS CONTAMINATION IN WATERWAYS AND DRINKING WATER SUPPLIES THROUGHOUT NEW SOUTH WALES

Organisation: SORR

Date Received: 18 December 2024

Dear Adam and David,

I hope this email finds you both well.

As you know, I've been actively raising awareness about PFAS contamination in our local Central Coast waterways ever since we discovered that the SORR Gyroid Sponge captured 2.94 grams of these dangerous forever chemicals per kilogram of the sponge deployed at LJ19 early last year. This discovery was a turning point for us, highlighting the scale of the contamination and underscoring the need for effective solutions.

Initially, as a citizen project lead for a Community Science Trial on Tuggerah Lake, and now as the General Manager of the SORR group, I've had the privilege of overseeing the development and deployment of our Gyroid Sponge technology across a variety of regions, including the UK, Ireland, India, and most recently Saudi Arabia. With our growing global presence and the capabilities of the Gyroid Sponge, I believe SORR could add substantial value to the ongoing NSW Parliamentary Inquiry into PFAS.

Here's how we can contribute to the inquiry and the broader efforts to mitigate PFAS contamination:

1. Diagnostic Tool

The SORR Gyroid Sponge offers a unique diagnostic capability by acting as a passive sampling device. When deployed in environmental water systems, the Gyroid Sponge selectively binds pollutants, including PFAS, providing an efficient method for mapping contamination gradients. This can be particularly valuable in understanding the extent and dispersion patterns of PFAS contamination across affected waterways. Our ability to capture real-time data on the concentrations and distribution of PFAS can directly inform the inquiry and provide policymakers with a clearer picture of contamination levels across NSW.

2. Preventative Measure

Beyond its diagnostic utility, the Gyroid Sponge can also be integrated into stormwater systems and other water management strategies as a

preventative measure. By capturing pollutants like PFAS and toxic metals before they can spread into broader ecosystems, the Gyroid Sponge acts as an effective barrier to prevent further environmental degradation. This proactive approach not only reduces the long-term impact of PFAS contamination but also supports compliance with emerging regulatory thresholds. Our technology could be an essential part of the state's efforts to manage PFAS pollution at its source, providing a sustainable solution to reduce ongoing contamination risks.

3. Remediation Solution

The Gyroid Sponge excels at capturing and removing PFAS, hydrocarbons, and nano-plastics from contaminated sites, offering a comprehensive remediation solution. Our proprietary Pollutant Adapted Gradient Extraction (PAGE) process enhances the sponge's adsorption efficiency, ensuring that it can remove contaminants with high effectiveness. The PAGE process includes treatments such as heat, radiation, and chemical modifications that optimise the sponge for different types of pollutants. This advanced technology allows us to offer a highly efficient and sustainable remediation option, with the added benefit of a fully reusable and recyclable product that prevents landfill waste and supports a circular economy.

Additional Benefits:

- **Sustainability**: The Gyroid Sponge is designed to be fully recyclable, preventing long-term waste accumulation and contributing to sustainability goals. Our ability to process the sponge at its end-of-life ensures that the environmental footprint is minimised.
- **Scalability**: Given our expanding operations across multiple regions, the technology is proven to be scalable for deployment in various environmental settings. We can rapidly respond to contamination hotspots and provide solutions tailored to local needs.

We are currently in discussions with organisations such as ANSTO to conduct further scientific analysis of the Gyroid Sponge's efficacy. While I understand submissions for the parliamentary inquiry may have closed, I firmly believe that our work and technology could offer valuable insights into managing and mitigating PFAS contamination in NSW. Our expertise

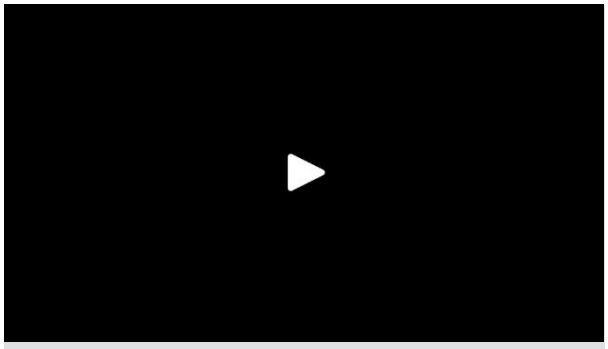
in this area, combined with the data we have gathered through field trials, would provide the inquiry with a deeper understanding of the available technological solutions to combat PFAS contamination.

Additionally, I've been following with concern the recent reports of PFAS contamination in Ourimbah Creek, where platypus necropsies have revealed alarming levels of contamination. Given this, we believe that the Gyroid Sponge could play a critical role in mapping PFAS and microplastic distribution in the creek, helping to identify key contamination sources and develop targeted strategies for remediation. This aligns with our ongoing efforts to implement the Gyroid Sponge in local environmental protection initiatives and expand its application across critical areas.

If you're open to it, we would be delighted to discuss how we could contribute further to the parliamentary inquiry and explore the potential for a project in Ourimbah Creek or other affected areas. We are keen to offer our technology as part of a collaborative effort to address PFAS contamination at both the diagnostic and remediation stages.

Thank you for considering this potential contribution. Please don't hesitate to reach out if you need further information, data, or a more detailed discussion on how we can assist in these important efforts.

Looking forward to hearing your thoughts.



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Sustainable Oil Recovery & Remediation is proud to be in collaboration with the Central Coast Council, supported by the Federal Government through the Environment Restoration Fund Program. The revolutionary Sucoil® Sponge is a product of Sustainable Oil Recovery & Remediation.