Executive Summary

- Chemical pollution in the UK is at critical levels and is impacting environmental health, UK REACH must be reformed and/or align with EU REACH in order to address this.
- Chemical production is set to increase putting further pressures our environment from pollution from industrial sources, consumer products and from waste. In addition, the associated fossil fuel and energy use is adding to carbon emissions, exacerbating the climate and biodiversity crisis.
- Considerable and commendable efforts have been made by Defra to update and involve civil society in the development of UK REACH however a number of concerns remain regarding the overarching strategy, processes, capacity and how UK REACH will address chemicals of concern in a circular economy. Currently far fewer chemicals in the UK are able to be assessed and restricted than in other developed countries. This means the UK is open to exposure from chemicals deemed hazardous in other parts of the world.
- As there appears to be insufficient capacity to assess and regulate chemicals we concerned about the capacity to embark on far reaching legislative change as a result of the proposed Retained EU Law Bill and the implications this may have for UK REACH.
- The UK no longer has access to data on chemicals on the UK market, as much of this data was held in the European Chemical Agency (ECHA) database. Deadlines for data submission to UK REACH look set to be extended further (following a recent consultation) leaving the UK regulators without key information on chemicals in the UK.
- Without data and few restrictions, and in the absence of a UK Chemical Strategy and environmental targets, UK REACH is not sufficiently robust to protect our health and environment from harmful chemicals. Current plans for developing UK REACH do not go far enough to address this shortfall.

About Fidra & our interest in UK REACH

Fidra is an environmental charity working to support sustainability and prevent plastic and chemical pollution. Fidra works with the public, industry and governments to deliver pragmatic, evidence-based solutions through inclusive dialogue. We use the best available science to identify and understand environmental issues with our targeted projects, demonstrating positive change. Fidra is a SCIO and Scottish Registered Charity SC043895 www.fidra.org.uk

As shown by the Environmental Audit Committee's inquiry into *Toxic Chemicals in Everyday Life*[i], chemical pollution is causing avoidable deaths[ii] and is acknowledged as one of the 5 drivers of biodiversity loss[iii]. In 2022, scientists warned that chemical pollution has driven us past the safe operating space for our planet[iv]. While regulatory actions such as the Water Framework Directive and EU REACH have helped the UK reduce point source pollution from industrial settings and have addressed some hazardous chemicals, more action is needed to tackle chemicals of concern in consumer products, waste, wastewater and sewage

sludge[v] [vi] [vii]. To prevent chemical pollution in the UK, and beyond, Fidra run a series of projects to reduce the impacts of chemicals on our environment, working with retailers, investors, the public and policy makers to implement solutions. Our projects have successfully reduced the use of endocrine disrupting chemicals, bisphenols, in receipts; 'forever chemicals' PFAS in school uniforms and food packaging; and our projects on plastic pollution and Scottish salmon farming are highlighting chemical pollution impacts on wildlife and communities locally and globally. As a UK REACH accredited stakeholder, member of the NGO Hazardous Chemicals working group and Scottish Chemical Policy Network, we are following and are consulted on the regulations, polices and strategies being deployed to tackle UK chemical pollution post EU Exit, including the development of UK REACH. As outlined below, Fidra have a number of concerns around the development and implementation of UK REACH and its ability to address chemical pollution in the UK.

Evidence & Observations on UK REACH implementation

As an environmental charity, our primary concern is whether UK REACH protects the environment and addresses chemical pollution. As it currently stands, UK REACH is not sufficiently robust to protect our health and environment from harmful chemicals and the current plans for developing UK REACH do not go far enough to address this. Considerable and commendable efforts have been made to update and involve civil society on the development and implementation of UK REACH, however, a number of concerns remain as outlined below.

Environmental principles, transparency and accountability

In the absence of a UK Chemical Strategy, questions remain over the principles on which UK REACH is being developed. Without a UK Chemicals Strategy, it is hard to ascertain the aims of UK REACH and scrutinise whether UK REACH is fit for purpose. There is evidence that some harmful chemicals such as PFAS are being considered for restriction, pending the delayed results of the Risk Management Options Analysis. However, there is no evidence the ambitions of the 25 Year Environment Plan to tackle toxic and persistent chemicals is being met. To date there is no evidence that core principles such as the precautionary principle, 'no data, no market', are being enacted and we would urge Defra to urgently set out the strategy, principles and environmental targets UK REACH will help deliver.

In the absence of a UK Chemicals Strategy and without open and transparent processes, there are questions on how and why decisions are made in UK REACH. While efforts are being made to update and involve civil society, too often we are presented with options to engage in processes that do not align with environmental or health goals. For example, in July 2022 a small number of NGOs were invited to submit restriction proposals into UK REACH, however this call was only sent to members of the UK Chemical Stakeholder Forum, and it was not made clear how these proposals would be assessed, by whom and who was being asked to take part in what was described as a 'prioritisation process'. Similarly, NGOs are regularly updated on the Alternative Transition Model being developed. The goals of this project remain obtuse but are often cited as to reduce costs and resource burdens on industry with little emphasis on what information is needed to protect our health and environment, further emphasising that health and environment is not at the forefront of UK REACH ambitions.

With regards to the practical and technical measures to address pollution, there seems to be a disconnect between the ambitions of the 25 Year Environment Plan, the developing UK Chemicals Strategy, and operational delivery of UK REACH. For example, concepts such as the grouping of chemicals of concern, which helps rationalise regulation and reduce regrettable substitutions, do not seem to have been widely adopted under current and future plans for UK REACH as matter of policy and seem to be missing from the Alternative Transition Model being developed.

Without ambitious environmental targets and sufficient human biomonitoring and environment monitoring, it is not possible to definitively assess UK progress in tackling chemical pollution. Given chemical pollution is already impacting UK health and environment it is becoming increasingly clear that UK REACH, in its current form, is not sufficiently protective and more ambitious reforms are needed to address the challenges of chemical pollution.

Capacity, resourcing, and the need for speed when identifying and restricting chemicals of concern

A key issue that seems to be impacting the implementation of UK REACH is capacity and resourcing. Given the rapid predicted growth of chemical production[viii] it is essential the UK has the capacity and resources needed to register, assess and restrict chemicals, and regulators have enforcement programmes in place. We are concerned at the slow pace of restriction progress, for example, we are still awaiting the publication of the PFAS Risk Management Options Analysis (RMOA) and the initiation of a RMOA on bisphenols in thermal paper which are just the first steps in a potential restriction.

Fidra are concerned that chemicals in need of urgent assessment and actions are subjected to a prioritisation process with very few being taken forward each year for further action. Defra has told us that the current round of prioritization may result in 5-10 chemicals being taken forward and that a focus group is being asked to help prioritise those that should be considered for further action. As an environmental charity, Fidra has decided not to take part in this prioritisation process as it could mean partaking in a process whereby the UK chooses whether to pursue an action on a chemical that causes cancer or one that causes neurological problems despite other countries being able to restrict both. We are told these impossible choices are necessary due to capacity.

We are also concerned the Retained EU Law Bill, if passed, could reduce capacity further and have unintended consequences for UK REACH.

Involvement from Scotland and devolved administrations

As a Scotland based environmental charity, Fidra are keen to ensure UK REACH delivers for the whole of the UK. While it is clear efforts have been made to involve Scotland and other devolved administrations in the development of UK REACH, it is also noticeable that the whole of the UK are not engaging in the restriction proposals process for example, as far as Fidra are aware, no proposals for restrictions were submitted from Scotland in 2021 or 2022. This is despite a suite of chemicals of concern being identified in Scottish rivers via the Chemicals Investigation Programme 2 (CIP2) and academic research highlighting chemicals of concern, such as bisphenols, being found in our environment. The restriction proposals are not sufficiently wide ranging and representative of concerns across the UK, and more

time and effort should be directed into ensuring the Environment Agency, SEPA, Natural Resources Wales, Centre of Ecology and Hydrology and academic institutions can highlight chemical issues, submit restriction proposals, and are supported in gathering the information needed to support a restriction proposal. Engaging all parts of the UK in all stages of UK REACH is critical. If there is insufficient capacity to identify and submit proposals to restrict chemicals of concern from across the UK, other options should be explored including EU alignment and/ or establishing a UK wide chemical agency.

Circular Economy

To protect our health and environment, UK REACH must address the contamination of secondary materials and recycled products. As we move to a circular economy, we risk locking dangerous chemicals into recycled products and our environment. Secondary materials contaminated with harmful chemicals are already reaching the UK market and our environment. UK beaches are polluted with biobeads from our wastewater treatment plants[ix] and plastic food packaging[x] that have been found to contain hazardous chemicals like antimony and halogenated flame retardants. These contaminants have also been found in black kitchen utensils[xi], indicating that they have been manufactured from recycled electronic plastic waste. Similarly, upholsterers have raised concerns about the potential health impacts of chemical flame retardants in furniture[xii] they repair and refurbish. This is not just an issue for persistent chemical flame retardants, endocrine disrupting bisphenols used in plastic and thermal paper can enter the human population from initial use and we risk further exposure from recycled materials and the environment. For example, bisphenols enter the body through the skin when touching receipts and also contaminate recycled paper[xiii]. This human exposure also causes on going contamination of the environment through the use of sewage sludge in agriculture[xiv]. Harmful chemical use is turning human waste into a source of toxic chemical pollution. The application of sewage sludge to land as a route for toxic poly- or per-alkylated substances (PFAS) into soil is poorly understood and a concerning gap**.** PFAS levels in sludges from wastewater treatment works are being measured through a current Chemicals Investigation Programme (CIP3)[xv] . Fidra are concerned that the use of PFAS in consumer products, such as 'stain resistant' school uniforms, contaminates sewage and then soil through the agricultural application of sludge. Compostable paper and board food packaging is also a risk to soil health. Seen by many as a circular economy solution to single use plastic, compostable food packaging is often coated with PFAS[xvi] once composted this adds PFAS into the soil and crops grown on it[xvii]. To maximise use of resources and encourage a safe circular economy, the UK must restrict the use of the harmful chemicals, ensure chemical transparency, and ensure the UK REACH registration process takes a comprehensive view of exposure and use. Examining the use of secondary materials in a circular economy means considering exposure pathways at all stages of use, reuse, repair, remanufacture and recycling. To date we have seen no evidence that the UK Alternative Transition Model being developed considers how chemicals registered cause exposure in a circular economy.

Conclusion and Key Questions

The implementation of UK REACH raises a number of questions for example:

- Why have only 2 chemicals been restricted since the UK's exit of the European Union?

- Realistically how do Defra intend to urgently address the lack of chemical safety data in UK REACH?
- What does 'lighter touch' mean in the context of UK REACH and how does that marry with realising the Environment Act and 25-year Environment Plan?
- As the UK moves to a circular economy how will UK REACH and its registration process assess use and exposures?
- Given that waste and recycled materials are contaminated with harmful and restricted chemicals (such Persistent Organic Pollutants deca-BDE in waste domestic seating) will the UK Government address the need for improved chemical transparency through supply chains and acknowledge its essential role within a circular economy?

Fidra recommend the UK Chemicals Strategy, environmental targets, and UK REACH are developed to help us manage chemical risks and tackle chemical pollution in the UK and beyond. The scale of the challenge should not be underestimated, and sufficient resources and capacity are required to develop robust regulatory systems. While strategies and systems are being developed, a pragmatic approach to dealing with the challenges of capacity in Defra/HSE and in devolved administrations would be to align with EU REACH and ECHA decisions on chemicals. This approach is supported by many UK companies and NGOs. If the UK is to pursue its own registration, evaluation and assessment processes for tens of thousands of chemicals on the UK market, further resources are required to ensure a dynamic system that is able to respond to the volume and variety of chemicals used in the UK and further consideration should be given to a establishing an independent UK chemical agency to support this. As chemical production grows so too does the scale of the challenge.

It is essential we have a robust regulatory system that reduces the pollution that is already impacting our health and environment.

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