



1 October 2019

Ministry for the Environment  
PO Box 10362  
Wellington 6143

To whom it may concern,

*Re: Ministry for the Environment proposed priority products and priority product stewardship scheme guidelines*

Climate change is a serious and leading threat to health and health equity, both in New Zealand and worldwide. Environmental degradation in this country and others is also a major threat to our people, our flora, and our fauna. The proposed priority products and priority product stewardship scheme guidelines consultation is an opportunity to address climate change, environmental degradation, health outcomes, and the costs created by a culture of use-once-and-discard that permeates healthcare. The New Zealand Society of Anaesthetists (NZSA) welcomes the opportunity to comment on the proposal for priority products and priority product stewardship. This regulation could be a key measure towards protecting and improving the health, well-being and the environment of New Zealanders.

#### **About the NZSA**

The NZSA is a professional medical education society, which represents over 650 medical anaesthetists in New Zealand. Our members include specialist anaesthetists in public and private practice, and trainee anaesthetists. We facilitate and promote education and research into anaesthesia and advocate on behalf of our members and the safety of their patients. As an advocacy organisation, we develop submissions on policy and legislation, work collaboratively with key stakeholders, and foster networks of anaesthetists nationwide. The NZSA, established in 1948, also has strong global connections and is a Member Society of the World Federation of Societies of Anaesthesiologists (WFSA).

#### **Overview**

In their daily lives, anaesthetists are confronted with high levels of waste. A relatively minor surgery/operation often generates about four domestic wheelie bins of waste, almost all of which goes to landfill. Under current regulations and practices in healthcare, almost nothing is recycled, very little is reused, and vast amounts of rubbish are created by a procurement culture fixated on "single use." Many anaesthetists describe a cognitive dissonance brought on by the waste and pollution they are forced to witness in the workplace. Integrated with the healthcare sector are many activities which pollute air, soil, and water. The NZSA welcomes proposals and schemes which will reduce waste, reduce carbon footprint, and improve the environment of New Zealand. The priority product stewardship proposal is in line with that goal.

The NZSA agrees with the six priority products identified in the consultation:

1. Tyres
2. Electrical and electronic products
3. Agrichemicals and their containers
4. Refrigerants and other synthetic greenhouse gases
5. Farm plastics
6. Packaging.

Regulated stewardship of these products will reduce the risk of harm on human health and on the environment. Furthermore, it provides a path to ensuring ethical procurement, an issue of great concern in healthcare. Product stewardship programmes expose manufacturers which utilise poor and unethical procurement practices.

## Specifics

### E-waste

The tools of the trade in anaesthesia are complex electronic items: monitors, anaesthetic machines, ultrasound, hand-held electronic devices, and computers of all kinds. These are often battery powered, or if not, contain batteries for emergency situations. The operating rooms in which we work are sophisticated environments containing electronics, and even the lights have batteries. A product stewardship approach to all this equipment is vital for successful diversion from landfill, and efficient re-use of resources. The NZSA supports the Annex II definition of waste electrical and electronic equipment of European Directive 2012/19/EU.

### Refrigerants and other synthetic greenhouse gases

It is estimated that in the UK 5% of acute hospital CO<sub>2</sub>e emissions are a direct result of all anaesthetic gases (volatile and N<sub>2</sub>O). In other words, anaesthetists are high carbon doctors, whose daily work releases relatively large amounts of ozone depleting substances and greenhouse gases. At this stage, these substances are vital for the delivery of medical care, and until such time as capture and reuse and/or destruction technology is readily available, medical gases should be excluded from this priority product category. However, when technological solutions are available, the NZSA would support their introduction, and the inclusion of medical gases into this category of priority product stewardship. (See below)

### Packaging

Vast amounts of plastic, paper and card packaging contain medicines, products, devices, and disposables. Healthcare facilities do not recycle this tsunami of packaging because they cannot. They are trapped in a single-use philosophy, which makes infection control and sterility simple, but environmental responsibility impossible. Single-use items are embraced to avoid spending on infrastructure to clean, sterilise, and repackage. Whereas New Zealand is well placed to reuse and recycle – we have plenty of water, sustainably generated electricity, and low waged workers – the healthcare sector purchases products which are

manufactured and packaged overseas, which all go into landfill. This wastes money on overseas spending and supports little New Zealand employment, other than in the landfill industry. The economy of healthcare waste is entirely linear. Almost no plastic in healthcare is stamped with resin codes, so does not get recycled. Almost all glass from millions of medical ampoules and vials is not recycled. Many operating theatres do not even recycle paper, as the amount of waste is so large that recycling seems without point. The NZSA endorses efforts to reduce this waste stream and practices of wastefulness and would be pleased by the proposed priority products and product stewardship guidelines.

#### Potential future additions

If the proposed scheme is successful, there may be opportunities to extend it to new waste streams. Three waste streams which are currently not satisfactory are: pharmaceutical waste, volatile anaesthetics and nitrous oxide, and medical/contaminated/infectious waste. Pharmaceutical waste has no dedicated path for management and destruction in New Zealand. Indeed, diverting drug waste away from municipal sewers is a phenomenon only happening now. Drug waste in hospitals, in particular in operating theatres, may be environmentally toxic, and yet be sent to landfills designed for household waste. Sanitary treatment, by combining pharmaceutical waste with contaminated/infected waste, may not render medicines harmless, and again sends potentially toxic products to landfills. Landfill leachate makes its way to municipal sewers. A programme of priority product stewardship could be extended to pharmaceuticals and ensure medicines do not make their way into the environment.

Inhaled anaesthetic agents (volatiles and nitrous oxide) are potent pollutants, (chemically similar to refrigerants) currently exhausted unmitigated into the atmosphere. Financial and environmental concerns help to limit pollution, but the profession is awaiting technologies to take atmospheric pollution to a lower level than can otherwise be achieved. A second phase extension of regulated product stewardship could include inhaled anaesthetic agents. A third opportunity for extension of a product priority and stewardship programme is medical/contaminated/infected waste. This is created by hospitals, most particularly in operating theatres, where anaesthetists sometimes despair at the large volumes heading eventually to yet more landfill. Such a scheme could enhance the incorporation of more reusable items, more washable devices, and better use of resources.

#### **Summary**

The supports this proposed regulation. We believe it can protect and improve the health, well-being and the environment of New Zealanders.

Thank you again for the opportunity to comment. If you have any questions regarding our submission, please contact me at [president@anaesthesia.nz](mailto:president@anaesthesia.nz)

Yours sincerely



**Kathryn Hagen**  
President