# PSGRNZ

Physicians & Scientists for Global Responsibility Charitable Trust

August 20, 2026

# Submission

Environmental Reporting Amendment Bill (321-1)

## Submitted to the:

Environment Select Committee


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**PSGRNZ would welcome an opportunity to speak to this submission.**

Physicians and Scientists for Global Responsibility Charitable Trust (PSGRNZ) works to educate the public on issues of science, medicine, technology (SMT). PSGRNZ work to encourage scientists and physicians to engage in debate on issues of SMT, particularly involving genetics and public and environmental health.

**The Environmental Reporting Amendment Bill (321-1), closing date for submissions is 11.59pm on Thursday, 20 August 2026.**

**PSGRNZ call on the Environment Select Committee.** *PSGR NZ opposes the Bill in its present form and recommends the amendments set out in this submission.*

An environmental intelligence system must help officials and the public to understand: What do we need to know in order to protect the environment, what do we presently not know, and what scientific capability is necessary to find out?

The Explanatory Note for the Environmental Reporting Amendment Bill states that:

> *The Environmental Reporting Amendment Bill (the Bill) makes amendments to the Environmental Reporting Act 2015 (the Act) that collectively aim to address the following policy objectives:*
>
> - *clarifying the role of the Act in providing a mandate for independent, regular, and authoritative reporting on the state of the environment:*
> - *addressing legislative barriers to efficiency and effectiveness of the reporting programme:*
> - *supporting effective programme implementation and minimising cost burdens, particularly for local government:*
> - *mandating good practice to safeguard the nature and scope of the reporting programme.*

The Bill cannot fully achieve these objectives, nor adequately answer the problem definition identified in the Regulatory Impact Statement, while it remains principally concerned with improving the reporting of information already collected.

A credible national environmental information system requires more than improved reporting architecture. The legislation must provide clear statutory authority and duties enabling responsible officials and scientific advisers to consider the full range of relevant environmental evidence and pressures, including those not captured by existing monitoring programmes. It must specify what government is required to look for; assign responsibility to institutions with sufficient independence, statutory authority and scientific capability to identify and investigate it; and establish enduring mechanisms for ensuring that necessary monitoring, research and analytical capability are adequately resourced. Without these elements, statutory obligations to identify environmental information gaps risk becoming little more than documentation of what New Zealand continues not to know.

This submission therefore addresses the missing upstream requirements: to identify significant known and emerging environmental pressures that are not being adequately monitored; expressly recognise anthropogenic chemical pollution, relevant chemical classes and other novel anthropogenic pressures; ensure indicators provide scientifically representative coverage of risks to ecological integrity and public health; identify and progressively address material evidence gaps; maintain the scientific and analytical capability required to detect emerging hazards; and provide clear institutional responsibility, resourcing and public accountability for doing so.

Without these elements, the Bill risks perpetuating the legacy problem already evident in freshwater policy: insufficient statutory specificity about the environmental pressures that must be considered, combined with insufficient institutional responsibility, capability and resourcing to actively identify, monitor and investigate significant and emerging pollutants and other environmental hazards. Better reporting cannot remedy environmental blind spots where the underlying information is never systematically generated.

**PSGR NZ recommends** that the Committee amend clauses 4, 5, 8, 12, 13 and 14, and insert any additional provisions and consequential amendments necessary, so that the amended Act:

- expressly recognises anthropogenic chemical contaminants and other significant novel anthropogenic entities as environmental pressures;
- requires the identification and periodic review of significant pollutant classes and pollution pathways against contemporary scientific evidence;
- requires environmental reports to adequately characterise significant known and emerging pressures, including pressures operating across environmental domains;
- requires environmental indicators collectively to provide scientifically representative coverage of significant known and emerging pressures on ecological integrity and public health;
- establishes a national Environmental Chemicals Indicator Framework, analogous in principle to the EEA/ECHA EU Indicator Framework for Chemicals;
- requires nationally significant evidence gaps to be accompanied by recommendations identifying the monitoring, research or other evidence generation required, responsible institutions, necessary scientific and analytical capability, indicative resources and timeframe;
- strengthens section 17 to address circumstances where necessary environmental information does not exist and must be generated rather than merely collected;
- amends section 19 so that the absence of mature datasets or established statistical methods does not prevent credible emerging environmental hazards from entering the reporting system;
- requires appropriate scientific breadth, clear independence and public accountability for the Strategic Evidence Panel, including publication of substantive recommendations and responses;
- establishes an early-warning mechanism through which emerging pollutants and other significant environmental hazards can enter the monitoring and reporting system without waiting for the next six-year reporting cycle; and
- establishes clear statutory responsibility and accountability for the scientific capability and enduring resources required to discharge these functions.

**PSGR NZ further recommends** that principal responsibility for the coordination, leadership and scientific oversight of the national environmental information system be assigned to an appropriately independent and scientifically capable Environmental Protection Authority, consistent with the direction of the Parliamentary Commissioner for the Environment's

recommendations. The Bill should make the additional and consequential amendments necessary to establish that responsibility clearly, rather than concentrating the principal environmental information functions within the Ministry.

The legislation should also establish an explicit accountability mechanism for adequate and enduring resourcing. Where nationally significant monitoring, research or analytical capability is identified as necessary, the responsible authority should be required to identify the capability and indicative resources required, whether those resources have been provided, and whether the necessary work has subsequently been undertaken. This would enable Ministers, Parliament and the public to see where important environmental information remains unavailable because the necessary scientific capability or funding has not been provided.

Without these amendments, Parliament risks legislating increasingly sophisticated methods for reporting what New Zealand already measures, without establishing an equivalent obligation and capability to identify significant environmental pressures that remain unmeasured. That would leave the central information failure substantially intact and cannot reliably deliver the 'effective and enduring environmental stewardship' promised by clause 4.

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## A. INTRODUCTION

Physicians and Scientists for Global Responsibility New Zealand Charitable Trust (PSGR NZ) supports the objective of strengthening New Zealand's environmental reporting system, and particularly the proposed purpose of supporting 'evidence-based decisions that lead to effective and enduring environmental stewardship.'

However, PSGR NZ considers that the Bill does not adequately address a more fundamental problem: New Zealand cannot effectively steward environmental resources where significant classes of anthropogenic pollution are not systematically monitored in the first place.

We therefore support provisions intended to improve environmental indicators, scientific monitoring standards and methods, and the identification of gaps in environmental data and evidence. However, the capacity to achieve these objectives is constrained by the lack of specificity in the Environmental Reporting Amendment Bill (321-1) and its parent Act, the Environmental Reporting Act (2015).

This is particularly important for synthetic and other manmade chemical pollutants arising from agricultural, industrial, commercial, urban and household activities.

We express our concern that the Regulatory Impact Statement (February 2025) and the Updated Cost Benefit Analysis (January 2025) do not reflect the contemporary global state of scientific knowledge concerning environmental chemical pollution, and consequently appear poorly informed as to the scale, complexity and risks presented by anthropogenic synthetic chemical contaminants to environmental and human health.

We are also concerned that the Bill does not establish sufficient public accountability for identifying and addressing significant gaps in environmental knowledge. Where important pollutants are not monitored, neither Parliament nor the public can readily know what risks remain unexamined, why monitoring has not occurred, who is responsible for filling the gap, or whether adequate resources have been committed to do so.

We are surprised that, as of August 2026 the exclusive reference to the Parliamentary Commissioner for the Environment (PCE) relates to the 2019 report 'Focusing Aotearoa New Zealand's environmental reporting system', when has produced a sequence of relevant papers, including the major July 2026 report: Unlocking New Zealand's environmental information and the March 2022 report Knowing what's out there: Regulating the environmental fate of chemicals.

The *Knowing what's out there* report is important, and the Ministry for the Environment and the EPA had initiated a joint work programme to implement its eight recommendations. An Official Information Act request was made on July 18 2026 to the Minister for the Environment, Nicola Grigg, seeking information on implementation of the eight recommendations. The Minister is also the Minister responsible for this Bill. The request was transferred to MCERT, despite the obvious relevance of the recommendations to the legislation now before the Committee.

It would be reasonable to expect that key aspects of those eight recommendations which expressly concern the regulation of environmental chemicals would be integrated into this Bill.

The recommendations in the March 2022 Knowing what's out there report included:

> ***[1] a common cross-agency framework for prioritising chemicals according to scale of use, potential harm and environmental presence, designed with Māori involvement;***
>
> ***[2] regulations empowering the EPA to collect and report information on the quantity and use of chemicals in New Zealand;***
>
> ***[3] specific funding to improve the EPA's modelling capabilities and develop New Zealand-specific environmental exposure scenarios;***
>
> ***[4] national guidance on best practice for monitoring the environmental fate of chemicals, including the respective roles of the EPA and regional councils;***
>
> ***[5] greater priority for the development and use of environmental exposure limits (EELs);***
>
> ***[6] policies addressing specific contamination pathways, including animal wastes, accumulation in agricultural soils, pharmaceuticals in wastewater, manufactured articles and by-products;***
>
> *[7] an updated regulatory policy for treated seed; and*
>
> *[8] consideration of a 'friend of submitter' service for Māori through the EPA's Kaupapa Kura Taiao team.*

The recommendations in bold are directly relevant to this Bill.

The Environmental Reporting Amendment Bill improves New Zealand's capacity to describe environmental information and identify information gaps, but it does not create the institutional machinery necessary to ensure that nationally significant gaps are filled. The absence of nationally consistent monitoring of synthetic chemical contaminants in freshwater demonstrates the practical consequence.

Without representative monitoring, analytical capability, environmental benchmarks and an institutional pathway from detection to regulatory and infrastructure responses, neither central nor local government can reliably determine what pollutants are entering freshwater, whether they are causing harm, where intervention is required, or whether investment in source control or wastewater treatment is warranted.

Reporting may reveal what we do not know; stewardship requires the capability and responsibility to act on it. Yet anthropogenic chemical pollutants are not expressly identified in either Act. There is no specific language addressing agricultural, industrial, urban or household chemicals, or the environmental risks arising from point-source or diffuse pollutant emissions. This includes wastewater, where attention to microbial contamination can obscure the wider chemical burden from pharmaceuticals, solvents, plastic-associated chemicals, pesticides and other contaminants.

For example, while the legislative topic ‘freshwater quality’ exists, the Ministry has confirmed that there is currently no nationally consistent monitoring framework for anthropogenic synthetic contaminants in freshwater. This remains the case despite approximately $221 million of public expenditure on the freshwater policy programme over five years.[1] The statutory capacity to report on freshwater pollution has therefore not generated a corresponding national capacity to know systematically what chemical pollution is present.

The existing reporting system contains freshwater; the existing legislation encompasses discharges and pressures; environmental agencies possess broad environmental responsibilities; and yet a substantial category of anthropogenic freshwater pollution remains without nationally consistent monitoring.

## B. THE ENVIRONMENTAL REPORTING ACT (2015)

If the purpose of the amended Act is now expressly to support ‘effective and enduring environmental stewardship’, the reporting system needs a reliable institutional pathway by which important information gaps identified through reporting lead to monitoring, research and ultimately management decisions elsewhere in government. That pathway is not secured by the Bill.

The parent Environmental Reporting Act 2015 is fundamentally a reporting statute, not an environmental monitoring or environmental management statute. It requires national environmental reports covering the state of the environment, pressures on it, impacts and changes over time. Existing regulations are broad enough to encompass chemical pollution in principle: for freshwater they prescribe ‘freshwater quality, quantity, and flows’ and, as pressures, ‘resource use and management, and other human activities’ and ‘discharges and waste’.

However, the Act does not require agricultural, industrial or urban chemicals, including pesticides, PFAS, pharmaceuticals, solvents, plastic-associated chemicals and household chemicals, to be monitored. Neither the parent Act nor the Bill requires representative coverage of different classes of pollutants within broad topics such as soil quality, freshwater quality, human activities, discharges and waste.

Consequently, a suite of indicators covering nitrogen, phosphorus, E. coli, dissolved oxygen and ecological indices can satisfy much of the national freshwater reporting framework while leaving synthetic chemical contamination poorly characterised. A declining macroinvertebrate index might tell us something is wrong; it cannot necessarily tell us whether the cause is pesticide exposure, temperature, sediment, nutrient enrichment, habitat alteration, pharmaceutical residues, chemical mixtures, or several pressures acting together.

Without explicit recognition of anthropogenic chemical pollution, there remains no assurance that monitoring and emerging data will adequately characterise the pollutant burden across New Zealand's soils, freshwater and marine environments, air and biota, including human populations.

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[1] MCERT August 18, 2026. National strategy: monitoring of synthetic chemical contaminants in freshwater 26-OIAD-02063. https://fyi.org.nz/request/35089-national-strategy-monitoring-of-synthetic-chemical-contaminants-in-freshwater#incoming-150613

Effective environmental stewardship must ultimately protect both environmental and human health, recognising that humans are part of, and biologically dependent upon, the ecosystems being monitored.

## C. CABINET WAS NOT PRESENTED WITH THE SCALE OF THE ENVIRONMENTAL INFORMATION PROBLEM

The breadth of agency consultation gives the appearance of comprehensive scrutiny, but the substance reported to Cabinet appears considerably narrower. DOC, EPA, MPI, Ministry of Health, Treasury, MBIE, the PCE and numerous other agencies were consulted, yet Cabinet was told that agency feedback concerned 'reporting responsiveness, data management and alignment with national and international frameworks, mātauranga Māori and Māori data sovereignty and legislating environmental outcomes.'

Strikingly absent from the reported feedback is the prior scientific question of which environmental hazards the existing system is failing to detect. There is no reported consideration of environmental toxicology or ecotoxicology, contaminant surveillance, emerging contaminants, chemical mixtures, wastewater chemistry, analytical capability or environmental epidemiology.

We cannot know from the Cabinet paper whether these matters were raised during consultation, but there is no evidence that they materially informed the advice presented to Cabinet. This is particularly concerning given that the Environmental Protection Authority, the Ministry for Primary Industries, Ministry of Health and PCE all have functions or expertise directly relevant to chemical exposures and their consequences for environmental and human health.

May 2026 Cabinet documents[2] and 2025 Regulatory Impact Statement repeatedly draw legitimacy from the Parliamentary Commissioner for the Environment's 2019 review, *Focusing Aotearoa New Zealand's environmental reporting system*. That report is important and many elements of the Bill clearly respond to it. In 2019, however, the Commissioner did considerably more than recommend changes to reporting frequency, roles and reporting architecture. He identified 'huge' gaps in environmental information, described the existing system as passive, fragmented and inadequate, and recommended a comprehensive, nationally coordinated environmental monitoring system, a mandated strategy to progressively fill data gaps, and assessment of the investment required to achieve this.

More importantly, the PCE's analysis subsequently developed. By 2022, after examining environmental reporting, research and public expenditure together, the Commissioner concluded that the links between the information government collects, the research it commissions, the environmental problems on which it spends public money and the environmental outcomes achieved were often 'tenuous, lacking in transparency and governed by short-termism.' This was no longer simply a criticism of environmental reporting. It was a criticism of the whole chain by

[2] Ministry for Cities, Environment, Regions and Transport. May 21 and 25 2026. Cabinet paper: Environmental Reporting
Amendment Bill: Approval for Introduction; LEG-26-MIN-0093 Cabinet Legislation Committee Minute of Decision; CAB-26-MIN-0178 Cabinet Minute of Decision https://environment.govt.nz/assets/publications/Environment-Reporting-Amendment-Bill-MfE-papers-v2.pdf?v=4c41d3e35e7f8a9f82859123c04e6e419686f9c4

which environmental knowledge is produced, translated into government decisions, funded and evaluated.

The Commissioner's 2022 conclusion is particularly relevant to this Bill. He called for a more strategic design of environmental monitoring networks so that data are nationally consistent, fit for purpose and representative; mechanisms capable of collecting new environmental information and driving innovation; predictable and stable funding for monitoring and technical expertise; and better integration of science and reporting into decisions about both the nature of environmental problems and how government should respond. Critically, he concluded that national leadership remained largely missing and recommended that the Environmental Protection Authority be given a specific mandate to provide oversight and leadership of environmental monitoring.

This matters because the Bill adopts some of the relatively straightforward machinery arising from the earlier reform process while leaving much of this deeper diagnosis unanswered. The Secretary can establish indicators and monitoring standards; officials must make ‘reasonable efforts’ to collect information; a Strategic Evidence Panel can provide advice; and a six-yearly report can identify data and evidence priorities. But none of these provisions establishes the comprehensive national monitoring capability, institutional leadership, sustained resourcing or mandated pathway for filling important data gaps that the Commissioner has repeatedly identified as necessary.

Indeed, the PCE's March 2022 submission on the proposed ERA reforms themselves already warned that active data collection required actual powers. While supporting several proposals that closely reflected his 2019 recommendations, the Commissioner specifically argued that powers should be given to actively collect environmental data because without them it would be difficult to move from passive to active information gathering. That later qualification is highly pertinent to a Bill whose operative response now relies substantially upon ‘reasonable efforts’ and voluntary information arrangements.

The Commissioner's subsequent work makes the direction of travel still clearer. In 2022 he called for foundational investment in environmental information, explicit justification for which environmental problems government chooses to prioritise or not prioritise, transparency about the outcomes sought and expenditure committed, and accountability for whether that expenditure actually works. In 2025 he proposed development of a federated national environmental information system, precisely because environmental information remains distributed among organisations with different priorities, functions and methodologies. The 2026 recommendations discussed above develop this institutional argument further.

The Government should therefore be cautious about presenting this Bill as implementing or substantially answering ‘the PCE's recommendations’. It implements selected recommendations from an earlier stage of a continuing body of work, while leaving important subsequent recommendations unresolved. Where the PCE's work is relied upon to establish the need for reform, the Committee should be given the benefit of the Commissioner's developed position, not merely those earlier recommendations that fit comfortably within the Government's preferred legislative model.

PSGR NZ therefore cautions against using selective alignment with the PCE's 2019 report as a source of legitimacy for the present Bill while leaving his subsequent analysis substantially unanswered. The Commissioner's work did not conclude in 2019. By 2022 he had explicitly identified the need for national leadership, active generation of new environmental information, predictable and sustained monitoring investment, stronger integration between science and government decision-making, and a specific EPA mandate for oversight and leadership of environmental monitoring. His subsequent work has continued to develop the case for a nationally coordinated, federated environmental information system.

This distinction is significant, yet it is not addressed by the solutions presented in the Bill: the Bill seeks to improve environmental reporting; the PCE's developed analysis calls for environmental intelligence capability. The former organises and interprets information. The latter must also determine what information society needs, identify what is missing, generate new evidence, maintain technical capability, connect evidence to expenditure and intervention, and determine whether environmental actions have worked.

Anthropogenic chemical pollution demonstrates why Parliament should insist upon that distinction. New Zealand cannot exercise stewardship over pollutants it does not systematically look for, cannot assess interventions without baselines, and cannot rationally allocate the costs of prevention, treatment or remediation without understanding sources, pathways and effects. A reporting system that becomes increasingly sophisticated at describing the things government already measures, while remaining silent about major classes of pollutants that it does not, would represent an improvement in reporting administration but not necessarily an improvement in environmental stewardship.

## D. THE REGULATORY ANALYSIS DOES NOT ADEQUATELY CONSIDER CHEMICAL POLLUTION

PSGR NZ is concerned that the policy analysis underpinning the Bill does not adequately examine whether New Zealand's environmental reporting system is capable of identifying important anthropogenic pollutants. The February 2025 Regulatory Impact Statement recognises gaps and inconsistencies in environmental data, but approaches the problem principally as one of improving the efficiency, completeness and usefulness of the existing reporting system. Indeed, it concludes that adding drivers and outlooks will provide an ‘almost complete snapshot’ of the state of the environment. This conclusion appears difficult to sustain where significant classes of environmental contaminants are not systematically monitored at all.

The accompanying Cost Benefit Analysis is even more limited in its treatment of pollution. Although it attributes substantial benefits to ‘less harm from pollution’, its monetised assessment does not attempt to value the benefits of detecting or reducing exposure to agricultural pesticides, industrial chemicals, PFAS, pharmaceuticals, endocrine-active chemicals, plastic-associated chemicals or complex chemical mixtures. Instead, the pollution benefit is derived from household-reported exposure to three broad categories: air quality, water quality and noise, with benefits calculated according to assumed changes in the number of households exposed to a

'problem'. The CBA nevertheless contributes to an estimated overall benefit of $1.218 billion and a benefit-cost ratio of 3.3 for the amendments.

This is an important limitation because the internationally recognised chemical-pollution problem is of an entirely different scale and character. Scheringer and Schulz's 2025 review, *The State of the World's Chemical Pollution*[3], estimates that approximately 350,000 chemicals occur on global chemical inventories, including thousands of pesticides and pharmaceuticals and more than 300,000 industrial chemicals. The authors conclude that the number, complexity and diversity of chemical uses have overwhelmed existing systems of chemical assessment and management, while many industrial chemicals have not been adequately tested and even pesticide testing remains incomplete. These chemicals enter water, air, soil and biota, and include both intentionally biologically active substances such as pesticides and pharmaceuticals and the vastly larger universe of industrial chemicals used in manufacturing and consumer products.

The problem also cannot adequately be addressed by monitoring a small selection of individual substances. Environmental exposures occur as mixtures. Scheringer and Schulz (2025) note that more than 100 industrial chemicals, pharmaceuticals or pesticides may occur together where industrial and wastewater effluents interact with agricultural catchments, and that mixture effects may be greater than predicted by single-substance regulatory assessment.

Endocrine-disrupting chemicals (EDCs) illustrate why chemical pollution cannot be treated as a narrow or static category. EDC activity occurs across multiple classes, including pesticides, industrial chemicals, PFAS, flame retardants, plasticisers, pharmaceuticals and personal-care products, with contaminants moving through water, wastewater, soils, sediments and biota. The risks extend across vertebrate species and aquatic food chains, from freshwater and marine organisms to humans, with developing organisms particularly vulnerable because disruption of hormone signalling during sensitive developmental windows can alter normal reproductive, neurological and physiological development.[4]

The contrast with the European Union is instructive. The EEA/ECHA EU Indicator Framework for Chemicals (2024)[5] was expressly constructed to monitor the drivers and impacts of chemical pollution and the effectiveness of chemicals legislation. It assesses chemical production, use, emissions and impacts and combines existing indicators with newly developed indicators and signals. Its environmental scope expressly encompasses chemical emissions into and presence within air, soil, water, biota, waste and secondary materials, including industrial chemicals, heavy metals and pharmaceuticals, and considers chemicals across their life cycle.

This produces indicators and signals that are materially more capable of supporting environmental stewardship: industrial chemical releases to air and water; pesticides in rivers, lakes and groundwater; hazardous substances in marine organisms; persistent organic pollutant emissions;

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[3] Martin Scheringer, Ralf Schulz. 2025. The State of the World's Chemical Pollution. Annual Review of Environment and Resources 50:381-408. https://doi.org/10.1146/annurev-environ-111523-102318

[4] Metcalfe CD, Bayen S, Desrosiers M *et al*. (2022). An introduction to the sources, fate, occurrence and effects of endocrine disrupting chemicals released into the environment. *Environmental Research,* 207:112658, DOI: 10.1016/j.envres.2021.112658

[5] EEA Report 02/2024. EU indicator framework for chemicals Report (PDF)Published 17 Apr 2024. European Environmental Agency. https://www.eea.europa.eu/en/analysis/publications/eu-indicator-framework-for-chemicals

chemical contamination of surface water and groundwater; PFAS contamination; pesticide risks in soils; landfill leachate; sewage sludge; wastewater treatment; chemical mixtures; and remediation technologies. Importantly, the European assessment itself acknowledges that many substances remain inadequately monitored and identifies further gaps concerning ecosystem exposure, mixtures, currently used versus legacy substances, soil contamination, treated wastewater and remediation technologies.

The contrast exposes a significant omission in the analysis supporting this Bill. The RIS, Cost Benefit Analysis and Cabinet papers appear to have been developed in striking isolation from the enormous body of scientific literature documenting anthropogenic chemical pollution as a major and expanding environmental challenge.

Anthropogenic chemical pollution is an extensively researched and well-established field of environmental science, supported by decades of scientific investigation. Hundreds of thousands of chemicals are in commerce globally, while decades of research have documented the release, persistence, mobility, transformation, bioaccumulation and biological effects of pesticides, pharmaceuticals, industrial chemicals, PFAS, endocrine-disrupting chemicals, plastic-associated chemicals and numerous other contaminants across air, soil, freshwater, marine environments and biota.

Yet this established scientific problem is barely visible in the policy analysis underpinning legislation whose stated purpose is to support effective and enduring environmental stewardship.

The scale of this omission is striking. The policy analysis underpinning the Bill reads as though the extensive scientific literature on anthropogenic chemical pollution had scarcely entered into consideration.

The global chemical-pollution challenge does not disappear because New Zealand's existing monitoring systems have failed to measure it. Nor should policymakers be permitted, through omission, to construct an environmental reporting regime as though this extensive scientific knowledge does not exist. The New Zealand policy process has concentrated on improving the architecture through which existing environmental information is collected and reported, without adequately asking the prior scientific question: does the information being collected provide representative coverage of the anthropogenic pollutants that contemporary science tells us government needs to understand?

PSGR NZ considers that this omission should be addressed in the legislation itself. The Bill should not prescribe hundreds or thousands of individual substances. Rather, the parent Act should expressly recognise anthropogenic chemical pollution as an environmental pressure, creating an obligation for secondary legislation, environmental indicators, monitoring standards and Data and Evidence Priorities Reports to maintain systematic consideration of agricultural, industrial, urban and household chemical contaminants, including emerging contaminants, mixtures and relevant transformation products.

This is particularly important because, as our freshwater example demonstrates, the absence of such specificity in the existing Act has coincided with the absence of a nationally consistent monitoring framework for anthropogenic synthetic chemical contaminants in freshwater. Better

reporting architecture alone provides no assurance that this substantial blind spot will be corrected.

## E. THE BILL: SPECIFIC CLAUSES THAT REQUIRE STRENGTHENING

1. PSGR NZ supports the Bill's intention to strengthen environmental reporting. However, examination of its operative provisions reveals a fundamental problem: the Bill improves the machinery for reporting information without adequately specifying what the environmental information system must be capable of detecting.

2. The Bill's General Policy Statement says that the legislation is intended to ensure that 'robust and credible environmental data and research' are available to the public and decision makers, strengthen mechanisms for collecting data and setting standards, and establish priorities for improving environmental data, monitoring and research. These are important objectives.

3. Yet the operative clauses do not require the environmental reporting system to maintain representative coverage of significant classes of anthropogenic contaminants. Nor do they establish an adequate mechanism for identifying emerging chemical hazards, filling nationally significant monitoring gaps, or requiring public accountability where those gaps remain unaddressed.

4. This is precisely where the Bill should respond to the PCE's developed recommendations concerning environmental information generally and environmental chemicals specifically.

5. PSGR NZ recommends that the Committee amend clauses 4, 5, 8, 12, 13 and 14 so that the Act expressly recognises anthropogenic chemical contaminants as environmental pressures and requires the identification and periodic review of significant chemical classes and pollution pathways. The Act should require environmental indicators collectively to provide scientifically representative coverage of significant known and emerging pressures on environmental and human health, supported by a national environmental chemicals indicator framework analogous in principle to the EEA/ECHA EU Indicator Framework for Chemicals.

6. Critically, the legislation must address the legacy problem demonstrated by freshwater policy: broad statutory language has permitted major classes of pollutants to remain outside systematic national monitoring. Where a significant pressure, chemical class or evidence gap is identified, the Act should require an accountable institutional response: identification of the monitoring and research required, the responsible agency or agencies, the necessary scientific and analytical capability, resource requirements and timeframe, followed by public reporting on whether the gap has been addressed. Agencies responsible for environmental information must be sufficiently empowered and resourced to actively generate necessary information where it does not already exist, rather than being confined to collecting and reporting available data.

7. The Bill should further require appropriate environmental and human-health scientific expertise on the Strategic Evidence Panel; publication of substantive Panel

recommendations and government responses; and an early-warning mechanism through which emerging pollutants and other environmental hazards can enter the monitoring and reporting system without waiting for the next six-year cycle.

### PSGR NZ therefore recommends that the Bill be amended to:

I. **IDENTIFY:** expressly recognise anthropogenic chemical contamination as an environmental pressure and require identification and periodic review of significant chemical classes and pollution pathways.

II. **MONITOR:** require environmental indicators to provide scientifically representative coverage of significant known and emerging pressures on environmental and human health, including through a national Environmental Chemicals Indicator Framework analogous in principle to the EEA/ECHA framework.

III. **DISCOVER:** require the environmental information system actively to identify pressures, contaminants and evidence gaps that existing monitoring may be failing to detect, informed by contemporary scientific evidence rather than solely by historically available datasets.

IV. **GENERATE:** where nationally significant information does not exist, require identification of the monitoring, research, analytical capability, responsible institutions, resources and timeframe necessary to generate it. The statutory function must extend beyond making 'reasonable efforts' to collect existing data.

V. **ACCOUNT:** require public reporting on significant evidence gaps, action taken to address them, unresolved gaps and the reasons why recommended monitoring or research has not been undertaken; and require substantive Strategic Evidence Panel advice and government responses to be publicly available.

VI. **ANTICIPATE:** establish an early-warning mechanism through which emerging contaminants and other significant environmental hazards can enter the monitoring and indicator system between six-year reporting cycles, supported by appropriate environmental chemistry, toxicology, ecotoxicology, epidemiology and environmental-health expertise.

VII. **EMPOWER:** assign national leadership and coordination of environmental information to an appropriately independent and scientifically capable EPA, with sufficient powers to actively obtain and generate information where nationally significant gaps exist.

VIII. **RESOURCE**: require stable, long-term funding for environmental monitoring, analytical capability and the scientific infrastructure necessary to identify and progressively address nationally significant evidence gaps.

8. These amendments address the central weakness demonstrated by New Zealand's freshwater experience. Broad statutory categories such as 'freshwater quality', 'human activities', 'discharges' and 'waste' have not been sufficient to produce nationally representative monitoring of anthropogenic synthetic contaminants.

9. Parliament should not reproduce that legacy problem in the amended Act.

10. Statutory specificity must be accompanied by institutional responsibility and sufficient powers to identify what needs to be monitored, actively generate missing environmental

information, and publicly account for whether significant information gaps have been addressed.

## CLAUSE 4 (NEW SECTION 3): 'ENVIRONMENTAL STEWARDSHIP' REQUIRES KNOWLEDGE OF ANTHROPOGENIC POLLUTION

11. Clause 4 significantly strengthens the statutory purpose. Environmental reports are now intended both to inform New Zealanders and to:

    *'support evidence-based decisions that lead to effective and enduring environmental stewardship.'*

12. PSGR NZ supports this amendment.

13. However, the remainder of the Bill does not provide a sufficient statutory mechanism for achieving this purpose. Environmental stewardship cannot be evidence-based if significant classes of environmental pollution are not represented within the evidence base.

14. This is particularly important for anthropogenic chemical contamination. Such contaminants can move between air, soils, groundwater, freshwater, wastewater, sediments, marine environments and biota, including humans. Some persist or accumulate; others transform into additional compounds; organisms encounter mixtures rather than substances in isolation; and exposures may have consequences for ecological integrity and human health.

15. The Bill therefore needs to connect its new stewardship purpose explicitly to the maintenance of an environmental information system capable of detecting significant known and emerging anthropogenic pressures.

16. PSGR NZ recommends that new section 3 expressly recognise that effective environmental stewardship requires adequate information concerning significant known and emerging pressures on environmental and human health.

## CLAUSE 5: 'PRESSURE' IS TOO GENERAL TO ENSURE ANTHROPOGENIC POLLUTION IS ACTUALLY MONITORED

17. Clause 5 defines pressure as:

    'a natural or human-induced factor, activity, or process that may be causing, or has the potential to cause, a change to the state of the environment'.

18. This is sufficiently broad to permit reporting on chemical pollution, but does not require it. Broad concepts such as 'freshwater quality', 'human activities', 'discharges' and 'waste' have been sufficiently capacious to encompass anthropogenic chemical contamination for years. Yet this has not produced nationally consistent monitoring of synthetic contaminants in freshwater. Permitting officials to consider chemical pollution is therefore demonstrably different from requiring the environmental information system to account for it.

19. PSGR NZ recommends that the interpretation provisions expressly define 'anthropogenic pollutant', and that clause 5 expressly incorporates anthropogenic pollutants within the

definition of pressure. The definition should encompass substances, materials, chemicals and chemical mixtures arising from agricultural, industrial, commercial, urban and household activities that cause, or have the potential to cause, adverse effects on the state of the environment, including through effects that may consequently affect ecological integrity or public health. It should also encompass relevant metabolites, degradation products and transformation products.

20. The environmental reporting framework should also expressly encompass genetically modified and gene-edited organisms, and other organisms developed or altered through emerging biotechnologies, where their release, use or environmental presence may constitute a significant environmental pressure.

21. The Act should additionally require significant classes of anthropogenic pollutants to be identified and periodically reviewed. This substantive obligation should operate through the provisions governing data and evidence priorities, environmental indicators and prescribed reporting topics, rather than relying upon a permanently closed statutory list of individual substances.

22. Relevant classes should be capable of including pesticides and biocides; industrial chemicals; pharmaceuticals and veterinary medicines; PFAS and other persistent or mobile substances; endocrine-disrupting chemicals; plastic-associated chemicals and microplastics; flame retardants; solvents and surfactants; household and personal-care chemicals; metals and organometallic compounds; persistent, bioaccumulative and toxic substances; substances of very high concern; and relevant chemical mixtures, metabolites, degradation products and transformation products.

23. These classes should be periodically reviewed against contemporary scientific knowledge, including evidence concerning environmental occurrence, persistence, mobility, bioaccumulation, biological activity, toxicity, exposure pathways and potential effects on ecological integrity and public health. Tomorrow's significant contaminant may not appear on today's list.

24. **RECOMMENDATION:** Amend clause 5 and the interpretation provisions so that anthropogenic pollutants are expressly recognised as environmental pressures. The Act should then require, through sections 13, 14A and 19, the identification and periodic review of significant classes of anthropogenic pollutants against contemporary scientific evidence, ensuring that these classes are systematically considered within environmental evidence priorities, indicators and prescribed reporting topics.

### CLAUSE 8, NEW SECTIONS 8 AND 11: THE BILL REPORTS 'PRESSURES' WITHOUT REQUIRING REPRESENTATIVE COVERAGE OF PRESSURES

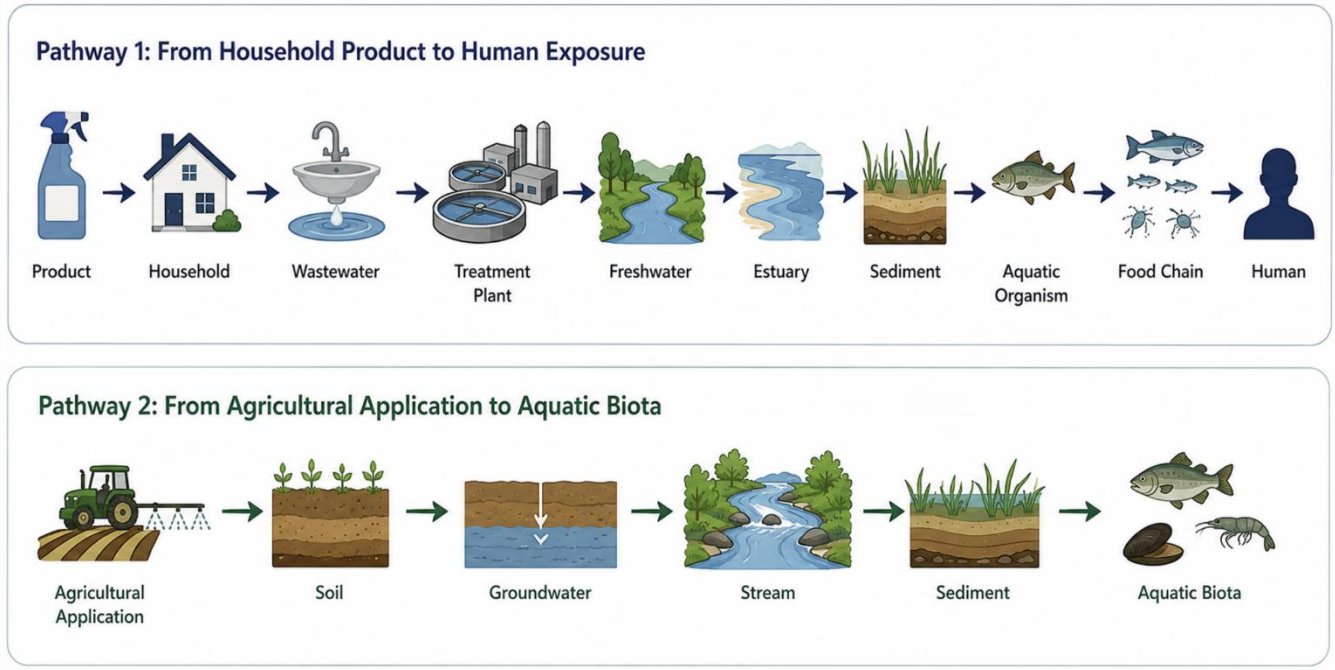
25. New section 8 requires state of the environment reports to describe drivers, pressures, environmental state, impacts and outlooks. Importantly, the specified impacts include both ecological integrity and public health.

26. New section 11 applies essentially the same reporting model to commentary reports, which may address the air, atmosphere and climate, freshwater, land and marine domains.

27. These provisions are potentially powerful. However, there is a major omission. Neither requires reports to assess whether significant environmental pressures have been adequately and scientifically characterised. A report may therefore accurately describe every pressure and indicator selected for reporting while important classes of environmental pressure remain outside the reporting system altogether.

28. The freshwater example demonstrates the problem. High-quality information about nitrogen, phosphorus, sediment, microbial contamination and macroinvertebrates does not establish that the anthropogenic chemical burden of freshwater has been adequately characterised. Scientific accuracy within the selected fields of observation is not the same as representative coverage of the environment.

29. The problem is compounded because anthropogenic pollutants and other environmental pressures do not necessarily respect the Bill's environmental domains. Contaminants can move between products, human activities and multiple environmental compartments.




30. For example, a chemical may move:

    ***product → household → wastewater → treatment plant → freshwater → estuary → sediment → aquatic organism → food chain → human.***

    Or:

    ***agricultural application → soil → groundwater → stream → sediment → aquatic biota.***

31. Similar cross-domain considerations may arise from other anthropogenic pressures, including novel biological entities and organisms introduced or altered through emerging biotechnologies.

32. Environmental reporting must therefore be capable of characterising significant pressures across their relevant sources, releases, pathways, environmental occurrence, movement

and transformation, ecological and human exposure, biological effects and trends. Artificial separation into individual environmental domains should not prevent the reporting system from identifying and following pressures that move between those domains.

33. **RECOMMENDATION:** Amend sections 8 and 11 so that environmental reports must, where relevant, adequately characterise significant known and emerging anthropogenic pressures, including their occurrence, trends, pathways and implications for ecological integrity and public health. The reporting obligation should expressly accommodate pressures that operate across environmental domains.

34. This reporting obligation should operate together with section 14A, which should require the environmental indicator system collectively to provide scientifically representative coverage sufficient to identify and characterise significant known and emerging environmental pressures.

## CLAUSE 8 (NEW SECTION 13): THE DATA AND EVIDENCE PRIORITIES REPORT NEEDS MUCH STRONGER TEETH

35. New section 13 is one of the most important provisions in the Bill. It requires the Secretary to discuss:
    - the state of environmental data, monitoring and research;
    - the evaluation, quality and coverage of environmental indicators;
    - the environmental indicators themselves; and
    - priority areas for improving environmental data and evidence.

36. The identification of a nationally significant environmental information gap requires more than its recording in a Data and Evidence Priorities Report. The provision identifies gaps but imposes no corresponding requirement to determine how important gaps will be filled.

    This risks producing an institutional catalogue of things New Zealand does not know.

37. **PSGR NZ recommends** that for every nationally significant evidence gap, section 13 should require identification of:

    the nature and significance of the gap; the environmental or human-health risk potentially obscured by that gap; the monitoring or research required; the responsible agency or agencies; analytical or scientific capability required; indicative resource requirements; priority and timeframe; and progress since the previous report.

38. For each nationally significant information or evidence gap identified under section 13, the report should identify its significance, the monitoring, research or other evidence generation required to address it, the appropriate responsible institution or institutions, capability and indicative resource requirements, priority and timeframe, and progress since the previous report.

39. Where government decides not to address a nationally significant evidence gap, that decision and its reasoning should be publicly reported.

40. This would create a key accountability and feedback loop: identifying what we do not know; establishing why the knowledge gap matters and the risks it may conceal; determining what evidence or action is required; assigning responsibility to the appropriate agencies or other parties; and establishing reporting requirements to ensure that the necessary work is completed, evaluated and placed on the public record.

    The present Bill only answers the first question.

## CLAUSE 8 (NEW SECTION 14A): INDICATORS MUST BE REPRESENTATIVE, NOT MERELY AVAILABLE

41. New section 14A requires the Secretary to set environmental indicators, but defines their purpose only as tracking:

    *'an aspect of the environment over time.'*

42. This is inadequate and cannot address whether the collection of indicators provides representative coverage of significant environmental pressures. A contaminant should not have to possess a mature national dataset before it becomes visible to the environmental reporting system. The legislation should expressly provide for the active generation of environmental information where representative data are absent, rather than limiting the statutory obligation to making 'reasonable efforts' to collect data that already exist.

43. **RECOMMENDATIONS:**

44. Amend new section 14A to require the Secretary to establish and maintain, as part of the national environmental indicator system, an Environmental Chemicals Indicator Framework.

45. The EU framework, developed by the EEA, ECHA and European Commission, contains 25 quantitative indicators supplemented by 22 'signals'. Importantly, it is expressly intended to monitor the drivers and impacts of chemical pollution, evaluate the effectiveness of chemicals legislation and identify areas requiring future action. It is conceived as a living framework that can develop as information improves.

46. Its indicators and signals extend well beyond conventional water chemistry. They include, for example, industrial chemical releases to air and water, pesticides, hazardous substances, chemicals in consumer products, persistent substances, human biomonitoring and emerging problems such as microplastics.

47. The framework should identify significant chemical classes and provide indicators, surveillance measures or scientific signals addressing, where relevant, chemical use and sources, releases and emissions, environmental occurrence, movement and transformation, ecological and human exposure, biological effects and temporal trends.

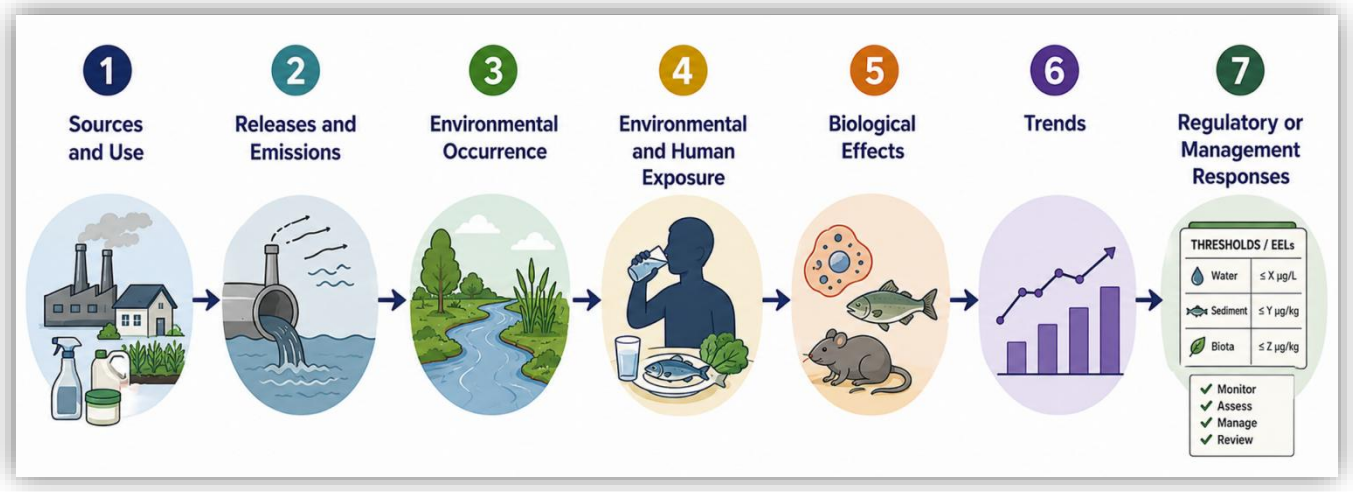
48. The framework should be periodically reviewed against contemporary national and international scientific evidence, using an approach analogous in principle to the EEA/ECHA EU Indicator Framework for Chemicals.

49. That is a fundamentally different approach from simply selecting indicators from whatever datasets New Zealand already happens to possess.

50. PSGR NZ recommends that section 14A require the Secretary to establish and maintain a national chemical pollution indicator framework, or equivalent component of the environmental indicator framework.

51. It should cover, at minimum:

    **sources and use → releases and emissions → environmental occurrence → environmental and human exposure → biological effects → trends → regulatory or management responses.**




52. The relevant chemical classes should be identified and periodically reviewed.

53. The European model is particularly useful because it also recognises signals: scientifically important phenomena where information may still be incomplete. The EEA describes these as information capable of indicating a phenomenon worth investigating despite incomplete coverage.

## CLAUSE 8 (NEW SECTION 14B): SCIENTIFIC MONITORING STANDARDS CANNOT CORRECT THE WRONG CHOICE OF INDICATORS

54. New section 14B requires the Secretary to specify:

    *'scientific environmental monitoring standards and methods for collecting environmental indicator data.'*

55. PSGR NZ strongly supports this provision but observe that it addresses measurement quality, not monitoring coverage. That distinction should be made explicit to the Committee and members of Parliament.

56. A scientifically robust method for measuring nitrate does not tell government whether it should also have measured pesticide metabolites, PFAS or pharmaceuticals.

57. A rigorous monitoring standard can therefore produce high-quality measurements of an inadequately characterised environment.

58. Section 14B should consequently require standards governing not only how environmental indicators are measured, but how representative monitoring programmes are designed, including geographical coverage, temporal coverage, relevant environmental matrices and, for contaminants, consideration of water, sediment, soil and biota where scientifically appropriate.

59. The EU's evolving approach illustrates why matrices are useful for recognising human and environmental health risk. Its current water framework can require monitoring of substances, groups of substances and emerging pollutants and recognises circumstances where biota, rather than water concentration alone, provides the appropriate environmental measure.

## CLAUSE 12 (NEW SECTION 17): 'REASONABLE EFFORTS' TO COLLECT DATA DOES NOT CREATE DATA THAT DO NOT EXIST

60. This is one of the weakest provisions in the Bill. The new section 17 states simply:

    *'The Secretary must make reasonable efforts to collect data for state of the environment reports and commentary reports.'*

61. New section 17 does not expressly require the generation, commissioning or establishment of new monitoring where necessary environmental information does not exist.

62. The phrase 'reasonable efforts to collect data' therefore provides no clear statutory pathway from identification of a nationally significant information gap to the commissioning or establishment of the monitoring, research or other evidence generation necessary to fill it.

63. **RECOMMENDATIONS:**

64. Where information necessary to characterise a significant known or emerging environmental pressure does not exist, the responsible environmental information authority should be required to identify the monitoring, research or data generation necessary to address the gap; the responsible agency or agencies; required scientific and analytical capability; indicative resources and funding requirements; timeframe; and subsequently report publicly on progress.

65. If councils, Crown research organisations, universities, wastewater operators or industries already possess relevant information, the Secretary must make reasonable efforts to obtain it.

66. However, as we have observed with regard to freshwater, if nobody is systematically measuring a pollutant, there is nothing to obtain.

67. Section 17 therefore requires an additional limb, operating alongside the Data and Evidence Priorities process in section 13:

68. Where the Secretary identifies a nationally significant deficiency in environmental information, the Secretary must identify and publicly recommend the monitoring, research, data generation or other action necessary to address that deficiency.

69. That would still respect the reporting function of the Act. It would not turn the Secretary into the environmental regulator.

70. But it would prevent the extraordinary situation in which the national environmental reporting authority identifies an important blind spot and has no statutory responsibility beyond recording that the blind spot exists.

## CLAUSE 13 (SECTION 19): REGULATIONS SHOULD BE REQUIRED TO ADDRESS MAJOR CLASSES OF ANTHROPOGENIC POLLUTION

71. Clause 13 expands the regulation-making provisions to accommodate drivers and outlooks. Under the existing Act, before recommending a topic for regulations. However, it leaves important existing thresholds in section 19(2) unchanged.

72. Under the existing Act, before recommending a topic for regulations, Ministers must be satisfied that, among other things:

    *19(2) (a) [a] pressure topic or impact topic affects significant areas, resources, or numbers of people:*

    *19(2) (b) [a] topic can be measured with robust statistical methods*

73. Under section 19(2) a topic may presently be prescribed only where, among other things, it 'can be measured with robust statistical methods'.

74. Clause 13 changes 'Ministers' to 'Minister' and adds drivers and outlooks, but does not amend these threshold tests.

75. Both warrant reconsideration in light of the Bill's proposed emphasis on environmental evidence, emerging trends and evidence gaps.

76. First, the requirement that a pressure or impact topic affect 'significant areas, resources, or numbers of people' risks overlooking environmental pressures that are significant because of the nature or severity of their effects rather than their geographical extent. A pressure may threaten a particular aquifer, sensitive ecosystem, threatened species or relatively small, exposed population, or present potentially serious, persistent or irreversible effects, without necessarily affecting a large area or number of people.

77. Second, section 19(2)(b) presently requires a topic to be capable of measurement using 'robust statistical methods'. This may work directly against the identification of emerging environmental pressures. An emerging contaminant may warrant investigation precisely because available information is incomplete, systematic monitoring has not been established and a mature statistical dataset does not yet exist. The absence of an established dataset should be capable of triggering scientific investigation and monitoring rather than preventing the environmental pressure from entering the reporting framework.

78. This problem assumes greater importance in a regulatory environment where many anthropogenic contaminants are not subject to comprehensive environmental monitoring or established environmental exposure limits. The environmental reporting framework must therefore be capable of recognising scientifically credible signals of environmental harm before comprehensive national datasets or regulatory thresholds have been established.

79. **RECOMMENDATIONS:**

80. Amend section 19(2) so that the absence of an established national dataset or mature statistical method does not prevent the prescription of a topic where credible scientific evidence indicates a potentially significant environmental or public-health risk. The significance test should similarly encompass the nature, severity, persistence or potential irreversibility of effects on particular ecosystems, species, populations or resources, rather than depending principally upon geographical extent or numbers of people affected.

81. Section 19 should further require prescribed topics collectively to provide adequate coverage of significant known and emerging anthropogenic environmental pressures.

82. For chemical pollution, the regulations should support a framework identifying relevant chemical classes and pollution pathways, informed by contemporary scientific evidence and periodically

83. Parliament need not specify individual compounds. Regulations could instead address classes such as:

    *agricultural chemicals; industrial chemicals; pharmaceuticals and veterinary medicines; persistent and mobile substances including PFAS; endocrine-active substances; plastic-associated chemicals; household and personal-care chemicals; metals and organometallic compounds; emerging contaminants; and relevant mixtures, metabolites, degradation and transformation products*.

84. The framework should also be sufficiently open to accommodate novel anthropogenic entities and biological pressures, including genetically modified and gene-edited organisms and organisms developed through emerging biotechnologies, where credible evidence indicates a potentially significant environmental pressure.
85. The regulatory framework could then evolve as scientific knowledge, analytical capability and environmental conditions change.

## NEW SECTIONS 20–23: THE STRATEGIC EVIDENCE PANEL REQUIRES SCIENTIFIC BREADTH, CLEAR INDEPENDENCE AND PUBLIC ACCOUNTABILITY

86. The Strategic Evidence Panel is potentially valuable. It can provide advice on its own initiative as well as when requested by the Secretary. However, the Bill requires only that its members collectively possess expertise relating to:

    *'environmental data, monitoring, and reporting.'*

87. That is inadequate for the purpose of protecting environmental and human health. A national body advising on emerging environmental trends needs substantive scientific

expertise capable not merely of managing information, but of recognising hazards, exposure pathways and environmental changes that existing monitoring systems may be failing to detect.

88. The legislation should require collective expertise spanning, as appropriate:

> *environmental chemistry, analytical chemistry, toxicology, ecotoxicology, epidemiology and environmental health, freshwater and marine science, ecology, exposure science, environmental monitoring and statistics*.

89. There is also an independence and accountability problem. The Secretary appoints members in consultation with the Minister, sets the Panel's terms of reference, may remove members for just cause and receives its advice. The Ministry provides the secretariat. Yet the Bill does not expressly require substantive Panel advice to be published or require the Secretary or Minister to explain whether significant recommendations have been accepted or rejected.

90. PSGR NZ recommends that substantive Panel advice be presumptively public, and that responses to significant recommendations be published. Otherwise the Bill creates nominally independent scientific advice without corresponding public visibility of what that advice says, whether it has been acted upon, or why it has been rejected.

91. **RECOMMENDATION:** Strengthen sections 20–23 to require appropriate scientific breadth on the Strategic Evidence Panel, greater structural independence, publication of substantive advice and a publicly accessible response to significant recommendations.

### THE SIX-YEAR CYCLE IS TOO SLOW FOR EMERGING CONTAMINANTS

92. The state of the environment report will be produced once every six years. The Data and Evidence Priorities Report follows it, while individual prescribed topics need only be covered by at least one commentary report during the six-year interval.

93. That architecture requires an explicit early-warning mechanism.

94. Chemical risks can emerge between reporting cycles. New analytical methods can reveal previously undetected contamination. International regulators can identify new hazards. Peer-reviewed research can identify previously poorly understood pathways or effects.

95. The European system increasingly recognises this problem through watch-list, indicator, signal and early-warning approaches. ECHA's developing role expressly includes early warning and risk identification and mechanisms for generating new data where important knowledge gaps exist.

96. New Zealand should have an equivalent capacity proportionate to its scale.

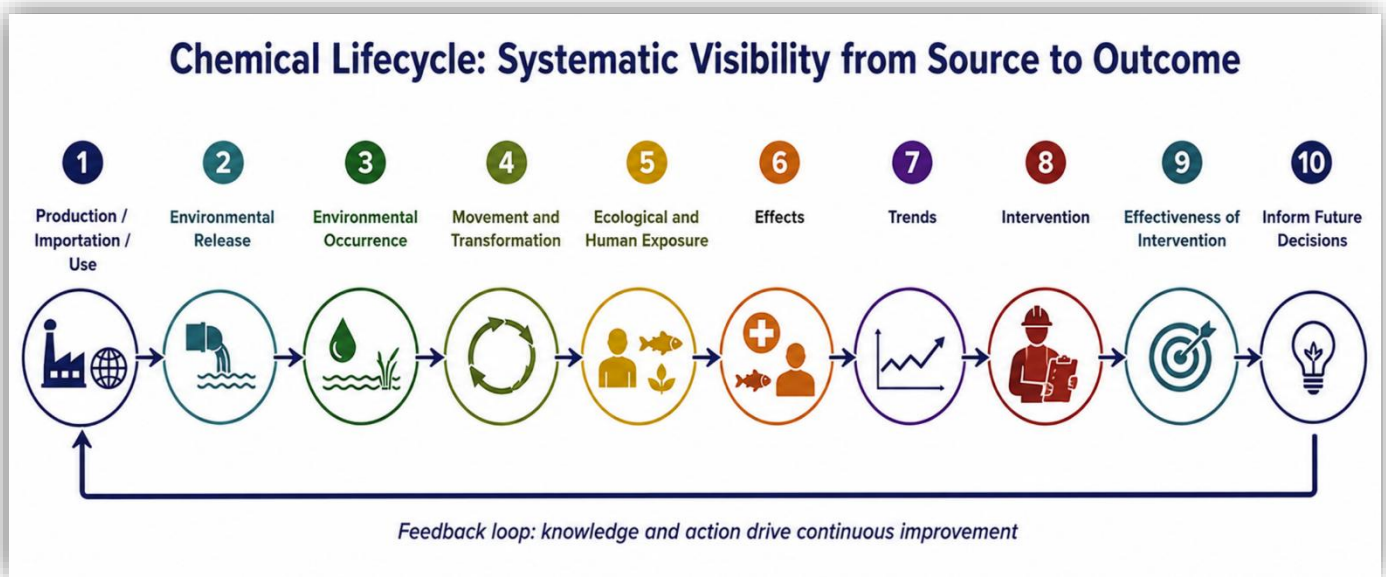
### A SPECIFIC CHEMICAL INDICATOR FRAMEWORK SHOULD BE REQUIRED

97. PSGR NZ therefore recommends that the Bill require development of a New Zealand Environmental Chemicals Indicator Framework, informed by the approach adopted by the EEA and ECHA but designed for New Zealand's particular agricultural, industrial, urban, wastewater and ecological circumstances.

98. The framework should not simply produce a list of problematic chemicals.

99. Its purpose should be to ensure systematic visibility across the chemical lifecycle:

**production/importation/use → environmental release → environmental occurrence → movement and transformation → ecological and human exposure → effects → trends → intervention → effectiveness of intervention.**




100. Such a framework should identify chemical classes, rather than depend exclusively upon individual substances, and contain a mechanism for emerging contaminants and scientific signals.

101. This is particularly important because contemporary European practice is itself moving toward monitoring groups of substances, including selected pesticides and pharmaceuticals by mode of action, rather than relying exclusively upon single-chemical assessment.

102. That approach also provides a way to accommodate endocrine-disrupting chemicals, because endocrine activity crosses conventional chemical categories.

## INSTITUTIONAL RESPONSIBILITY SHOULD NOT BE CONCENTRATED WITHIN THE MINISTRY

103. There is a fundamental institutional problem, as MCERT is not a suitable Ministry within which to locate this responsibility, due to its competing responsibilities. The Bill places substantial responsibility for the environmental information system with the Secretary for the Environment, and therefore within the Ministry. The Secretary sets indicators, specifies scientific monitoring standards and methods, produces the Data and Evidence Priorities Report, appoints the Strategic Evidence Panel and establishes its terms of reference.

104. PSGR NZ does not consider this concentration of functions appropriate for the long-term environmental intelligence system contemplated by the Bill's new stewardship purpose.

105. This concern has become more pronounced following the incorporation of the former Ministry for the Environment into the Ministry for Cities, Environment, Regions and Transport (MCERT). Environmental stewardship now sits institutionally alongside major portfolios concerned with the planning, construction, operation and expansion of human infrastructure.

106. These functions are important, but they are not institutionally neutral in relation to environmental protection. Human infrastructure and economic activity are themselves major sources of pressures upon the biological environment, including land disturbance, resource consumption, wastewater and stormwater discharges, transport emissions, industrial development, urban contaminants and habitat modification.

107. The institutional problem is therefore not that infrastructure is inherently undesirable. It is that the institution responsible for independently identifying and characterising environmental pressures should have sufficient statutory autonomy from institutions whose other responsibilities include facilitating activities capable of creating those pressures.

108. There is an important difference between a ministry whose principal functions include advising Ministers on policy and infrastructure priorities and an environmental authority charged with maintaining independent, long-term scientific capability to detect environmental hazards.

109. This distinction becomes particularly important where environmental evidence may have inconvenient regulatory or fiscal consequences. Detection of an industrial contaminant, for example, may ultimately require tighter discharge controls, costly wastewater infrastructure, restrictions on chemical use or expenditure on remediation. The institution responsible for establishing whether the problem exists should not be structurally weakened by competing policy objectives concerning the activities giving rise to the pressure.

110. This is precisely why the PCE's developed recommendations concerning the EPA matter.

111. The PCE has recommended strengthening the EPA's mandate so that it assumes responsibility for the coordination, leadership and management of New Zealand's environmental information system, supported by the technical capability necessary to ensure that environmental regulation is implementable and environmental outcomes can be monitored.

112. PSGR NZ considers that this model provides a stronger institutional foundation for the purposes Parliament is now inserting into the Act.

113. **RECOMMENDATIONS:**

114. The Bill should be amended so that principal responsibility for the coordination, leadership and management of the national environmental information system rests with an appropriately independent and scientifically capable EPA, rather than concentrating

these functions with the Secretary within MCERT. The Ministry should retain an important policy role, but the generation, coordination and scientific oversight of national environmental information should operate with sufficient institutional independence from competing infrastructure and development functions.

## THE BILL MUST PROVIDE FOR ADEQUATE AND ENDURING FUNDING

115. New Zealand has a long history of imposing regulatory obligations without providing the commensurate financial resourcing.

116. The Bill imposes new or strengthened functions relating to environmental indicators, scientific monitoring standards, data collection, evidence priorities and expert advice. Yet identifying an information gap does not create the scientific capability required to fill it.

117. Representative environmental monitoring requires sustained funding. Chemical pollution makes this particularly apparent. National surveillance may require specialist sampling programmes, analytical chemistry, laboratory capability, environmental toxicology and ecotoxicology, environmental exposure modelling, biological monitoring, data infrastructure and longitudinal monitoring across water, soil, sediment, air and biota.

118. These capabilities cannot reliably be assembled intermittently after a problem becomes politically visible. They constitute long-term scientific infrastructure.

119. Nor should national environmental monitoring depend excessively upon short-term contestable research funding. Monitoring intended to establish environmental baselines and detect changes over decades requires institutional continuity.

120. This is closely connected to accountability. A Data and Evidence Priorities Report should not merely identify that information is missing. Where a nationally significant gap is identified, the reporting framework should establish what capability is required, what it is expected to cost, who is responsible for providing it, whether funding has been provided, and what progress has subsequently been made.

121. Without this, Parliament risks legislating duties that agencies lack the resources to discharge.

122. **RECOMMENDATION:** The Bill should expressly require adequate, stable and long-term resourcing of the national environmental information system. The Data and Evidence Priorities process should identify the funding and scientific capability required to address nationally significant monitoring and evidence gaps, and subsequent reports should publicly record whether those resources were provided and whether the identified work was undertaken.

*Physicians and Scientists for Global Responsibility New Zealand (PSGR NZ) is an independent scientific and medical organisation committed to evidence-based public interest advocacy. This briefing is based on analysis of the bill as introduced, 321-1, the Regulatory Impact Statement, the Cabinet documents cited, and the January 2025 cost benefit analysis.*