Regulatory Impact Statement (RIS)

Proposed amendments to the Ozone Layer Protection Regulations 1996 to repeal hydrochlorofluorocarbon wholesaler permits and importation

Agency Disclosure Statement

This Regulatory Impact Statement (RIS) has been prepared by the Ministry for the Environment. It provides an analysis of options to fully phase-out domestic consumption of hydrochlorofluorocarbons (HCFCs) in accordance with international phase-out obligations under the Montreal Protocol (on Substances that Deplete the Ozone Layer).

The obligations upon member countries that have ratified the Montreal Protocol have been in place for decades, and were agreed multilaterally in order to ensure a smooth, periodic transition for all parties and sectors. The New Zealand Government has previously committed to and promoted a final HCFC phase-out by 1 January 2015, which has been administered through the implementation of the Ozone Layer Protection Act (OLPA) 1996 and the associated Regulations. The Minister for the Environment has directed officials to complete the HCFC phase-out within the constraints of these existing frameworks. In August 2015, Cabinet approved targeted consultation with relevant industry stakeholders.

Although inconsistent with long-standing Government policy, the category of wholesaler permits was not given a final phase-out date in the Ozone Layer Protection Regulations (the Regulations). It remains unclear why not, although it is most likely the result of a drafting error. Nevertheless, this RIS has been prepared with the original 2015 target, and the policy intent of OLPA and the Regulations, firmly in mind, particularly as strong efforts have been made by industry groups to adhere to these guidelines.

There are uncertainties around the exact economic impact of HCFCs no longer being available. Overall, New Zealand's reliance on HCFCs is minimal, as imports are capped at a minimal amount, and the land-based refrigerant and air conditioning industry has adopted the alternatives. The known remaining end users of HCFCs are fishing companies, which have a highly diversified fleet and are bound to strict requirements at sea. They will most likely be financially impacted by the proposed regulatory amendments, depending on their particular vessel type and configuration. Whilst there is limited evidence on the exact number or types of vessels using HCFCs, end users have long been aware of the international phase-out requirements through significant promotion by wholesalers and the Government.

The proposed regulatory amendments would repeal the wholesaler permit category and cease all bulk HCFC imports. This analysis is limited to the impact of these regulatory amendments and the options that maintain compliance with the Montreal Protocol, using either evidence provided by wholesalers and end users through the targeted consultation process, or reporting carried out by the Montreal Protocol's Ozone Secretariat. The scope of the analysis does not extend to considering the viability of alternatives to these substances.

Malcolm McKee (Director, Stewardship), Ministry for the Environment

Date: 31 May 2016

Executive Summary

1. New Zealand is obliged to phase out its domestic consumption of hydrochlorofluorocarbons (HCFCs) as a signatory party to the internationally agreed and binding Montreal Protocol. Under the Protocol, developed countries must phase out domestic HCFC consumption by 1 January 2020, as part of global efforts to protect the ozone layer and prevent further damage to human health and the environment.

2. The Ozone Layer Protection Act and Regulations 1996 lay down the broad controls for ozone-depleting substances, including HCFCs, and their importation into New Zealand. Aside from exemptions for critical or essential uses, HCFC imports currently occur via wholesaler permits issued by the Environmental Protection Authority (EPA). Under the current Regulations, the EPA retains the discretion to grant wholesaler permit applications beyond 2020, which, if successful, risk breaching the Montreal Protocol and incurring substantive penalties for New Zealand.

3. The Ministry for the Environment is proposing amendments to the Regulations to repeal wholesaler permits from 1 January 2017, in order to comply with obligations under the Montreal Protocol, and address an environmental issue that has particularly high stakes for New Zealanders' health and wellbeing.

4. Targeted consultation showed the impact of these regulatory amendments would largely be minimal as most domestic users have already phased out HCFCs, with the exception of fisheries. The fishing sector has not entirely transitioned away from HCFC technology and will, therefore, bear the economic brunt of the proposed amendments.

Status quo and problem definition

New Zealand and the Montreal Protocol

5. New Zealand was an early signatory party to the Montreal Protocol, which it ratified in 1987 and has since championed internationally, owing to the particular risk facing New Zealanders of further ozone layer depletion. The Montreal Protocol is widely considered to be the most successful international environmental protection agreement, leading to the phase-out of over 98 per cent of the historic levels of global production and consumption of ozone-depleting substances.

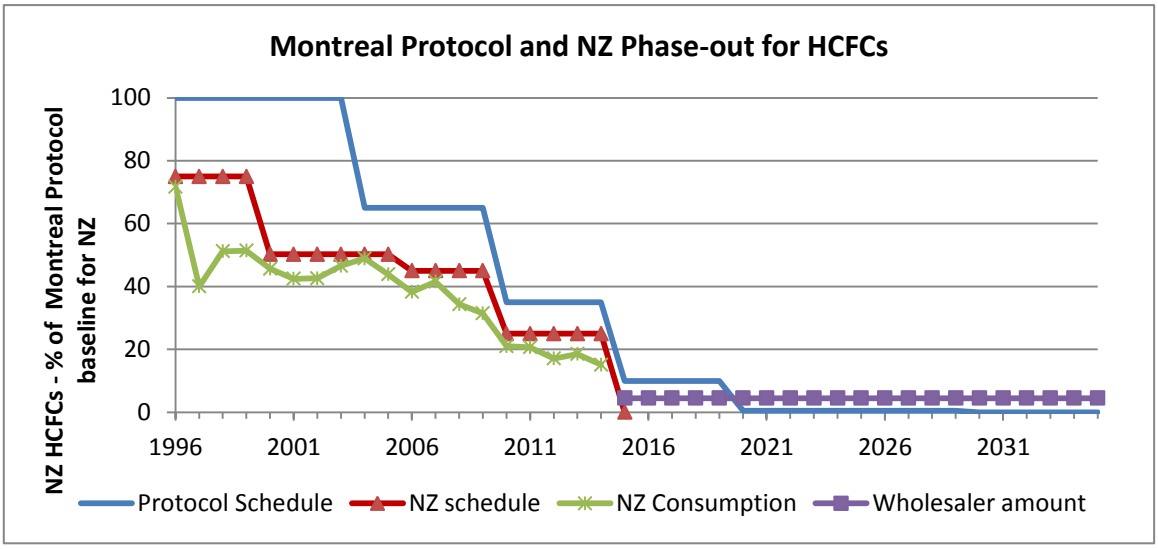
6. The United Nations Environment Programme (UNEP) 2010 Synthesis Report notes that observed global, mid-latitude and polar ozone column amounts are lower than 1980 levels, but have neither decreased nor increased during the last decade. If the Protocol had not been successful and emissions of ozone-depleting substances had continued to increase, there would have been considerable ozone depletion and substantial increases of ultraviolet radiation. This would have had serious impacts on human health and the environment, for example, a likely increase in skin cancer.

7. New Zealand's commitments under the Montreal Protocol (and the overarching Vienna Convention on Substances that Deplete the Ozone Layer) are contained in the Ozone Layer Protection Act 1996 (the Act) and the Ozone Layer Protection Regulations 1996 (the Regulations). The EPA is responsible for enforcing the legislation and managing

the permit system for imports and exports, while the Ministry for the Environment has overall responsibility for policy. The New Zealand Customs Service enforces the import and export controls at New Zealand's borders.

8. Since the introduction of the Act and the Regulations, successive New Zealand governments have publicly stated the intention of completing the domestic HCFC phase-out by 2015, five years earlier than required under the Montreal Protocol. Bulk new HCFCs are the last remaining controlled substances that New Zealand is required to phase out under the Protocol. **Figure 1**, below, outlines New Zealand's HCFC consumption and planned phase-out schedule, alongside that of the Montreal Protocol.

Figure 1: Montreal Protocol vs New Zealand HCFC phase out schedule[1]



9. As Figure 1 shows, New Zealand has historically been well within the bounds of both its domestic HCFC phase-out schedule and international obligations prescribed by the Montreal Protocol. However, it also shows that, if permitted to continue under the Regulations, the current allocation of wholesale imports would exceed Montreal Protocol limits from 1 January 2020 onwards.

10. The Montreal Protocol's non-compliance procedure contains an indicative list of measures that may be taken in the event of breach by a Member State, including:
    a) appropriate assistance, including assistance for the collection and reporting of data, technical assistance, technology transfer and financial assistance, information transfer and training;
    b) issuing cautions; and
    c) suspension, in accordance with the applicable rules of international law concerning the suspension of the operation of a treaty, of specific rights and privileges under the Protocol, whether or not subject to time limits, including those concerned with industrial rationalization, production, consumption, trade, transfer of technology, financial mechanism and institutional arrangements.

[1] New Zealand's 1989 baseline consumption was 56.0 ozone depleting potential (ODP) tonnes. Figure 1 shows total consumption of HCFCs has reduced to 8.4 ODP tonnes in 2014, an 85% reduction from baseline levels.

HCFC phase-out and wholesaler permits

11. Historically, HCFCs were imported under the authority of a base year permit, a special permit or wholesaler permit, as granted by the EPA. Under the Regulations, base year permits and special permits were prescribed the following periodic reduction (phase-out) timeline, culminating in 100% reduction by 1 January 2015:

Period	**Reduction (%)**
1 January 1996 to 31 December 1999	0
1 January 2000 to 31 December 2009	33
1 January 2010 to 31 December 2014	75
1 January 2015	100

12. However, for reasons unknown, the same timeline was not applied to the wholesaler permit category in the Regulations. This is potentially the result of a drafting error, as there are already exemptions for essential or critical uses of controlled substances provided elsewhere. The EPA may currently issue wholesaler permits not exceeding a combined total of 2.5 tonnes of ozone-depleting potential[2] (ODP) and divide the allocation among the applicants as it considers fair. Whilst this allocation remains below prescribed Protocol limits between 1 January 2015 and 31 December 2019, it would exceed these from 1 January 2020 onwards.

13. Beyond 1 January 2020, the Montreal Protocol allows for a very small amount of HCFC imports to continue through to 1 January 2030 (restricted to 0.5% of 1989 base level consumption for servicing of existing refrigeration and air-conditioning equipment). This provision is colloquially referred to as the "servicing tail". New Zealand's servicing tail is calculated at 0.275 ODP tonnes, which amounts to 11% of the current wholesale import allocation (2.5 ODP tonnes) and just 3.3% of total HCFC consumption in 2014 (8.4 ODP tonnes[3]).

14. Since New Zealand's phase-out schedule was first promoted to industry in 2001, users have heavily invested in transitioning away from ozone-depleting HCFCs. Refrigerant Recovery New Zealand Ltd. (a Trust for the Destruction of Ozone-Depleting Substances) was established in 1993 to collect and dispose of ozone-depleting substances used in the refrigeration and air conditioning industries. The Trust is comprised of directors representing the refrigeration and air conditioning industry, motor trade automotive air conditioning sector, refrigerant wholesalers, chemical manufacturers and distributors, the dairy industry and the retail grocers association.

15. With the aid of the Trust, the large part of HCFC end users in New Zealand has gradually but successfully replaced existing equipment with the tried and tested alternatives. As well has being able to use non-ODP alternatives, end users have had the opportunity to recycle HCFC refrigerants from redundant or replaced equipment. This transition was achieved as a direct response to wide promotion by the New

[2] ODP tonnage is the mass of the substances multiplied by its ozone depleting potential.
[3] The combined total of HCFC consumption from base year permits, special permits and wholesaler permits.

Zealand Government – including the Ministry and Minister for the Environment – of the final phase-out of HCFCs by 1 January 2015.

16. Therefore, the large variety of HCFC end users has adhered to the New Zealand Government's guidance to completely phase out HCFCs by 1 January 2015. The wholesaler permit category must be repealed under the Regulations as soon as practicable, not only to ensure New Zealand's strict compliance with the Montreal Protocol, but also for consistency with previous policy guidance.

HCFC use on-board vessels

17. Despite New Zealand's widely promoted phase-out schedule, there are some remaining users that are still reliant on a particular HCFC, known as R-22. R-22 accounts for 90% of all HCFC wholesale imports into New Zealand and is typically used for refrigeration and air conditioning at sea. Although its detrimental effect on the ozone layer is well established, R-22 has low global warming potential (GWP) and is a particularly safe, stable and cost-effective gas favoured by fishing companies.

18. Owing to global market trends and controls under the Montreal Protocol, widespread use and stockpiling of R-22 have significantly declined. Nevertheless, many vessel operators in New Zealand are still reliant on R-22 for maintenance and repair of existing systems and will be particularly impacted by an end to HCFC imports. The fishing industry cites the relatively higher compliance costs and unsuitability of alternatives at sea as the reasons for delaying the R-22 switchover. The latter is due to the reduced energy efficiency and performance of alternative gases, and/or stricter requirements at sea around chemical and thermal stability, and health and safety.

19. The New Zealand fisheries sector has long been aware of the HCFC phase-out and is in the process of switching over to the alternatives. Commercial fisheries have acknowledged the domestic HCFC phase-out required by the Act, specifically referring to the "prohibited trading or manufacture of R-22 after 1 January 2015"[4]. There may be various refrigerant types used on each vessel depending on the target temperature required, but R-22 is still the most commonly used refrigerant by many commercial fishing companies in New Zealand. Some of these have noted that replacing R-22 systems on their vessels would be expensive and/or problematic.

20. As a result of the phase-out, some fishing companies may ultimately be faced with the decision to decommission vessels altogether if the compliance cost is deemed too high. The extent to which this will be the case is unclear, as the total number of R-22 users is not easily quantified, but is expected to be in the minority. Most remaining HCFC users either have a variety of options available to them or will be able to manage the R-22 switchover within existing operating costs.

Other relevant changes to New Zealand legislation

21. The Act and the Regulations are now applicable to all registered foreign charter vessels operating within New Zealand's Exclusive Economic Zone (EEZ).

[4] Sanford 2013 Sustainable Development Report, available online at http://www.sanford.co.nz/

Amendments to the Fisheries Act 1996 entered into force on 1 May 2016, requiring all foreign charter vessels to be reflagged to New Zealand.

22. Previously, foreign charter vessels in New Zealand's EEZ were operated by many New Zealand-owned commercial fishing companies. They are no longer able to source HCFCs offshore and re-enter the EEZ as they did previously, as this would be considered an unauthorised HCFC importation. It is, therefore, important to note that the proposed HCFC phase-out will not only apply to domestic fishing vessels, but on the former foreign charter vessels as well.

Objectives

23. Following on from the problem definition and status quo, the objectives of the preferred option are to:

- comply with international commitments and obligations under the Montreal Protocol;
- implement New Zealand's domestic HCFC phase-out with equitable impact on industry;
- encourage domestic uptake of HCFC alternatives as soon as practicable to better align with the direction of global market trends; and
- contribute to overall global efforts to reduce depletion of the ozone layer.

Assessment Criteria

24. In order to meet the objectives, the following criteria should be met:

- *compliance*: the option meets at least minimum credible obligations under the Montreal Protocol;
- *integrity*: the option maintains consistency with the intent of the Act and the Regulations, and proximity to the Government's long-standing 2015 phase-out target;
- *administrative efficiency*: the option minimises regulatory burden and procedural timeframes;
- *equity*: the option does not significantly advantage or disadvantage one sector or end user over others; and
- *transition time*: the option encourages a prompt transition to alternatives to better align HCFC users with international best practice and market conditions.

Options and Impact Analysis

25. This section discusses the key advantages and disadvantages of each option to complete New Zealand's HCFC phase-out within existing domestic and international constraints (the Montreal Protocol; the Act and the Regulations) and in accordance with the above assessment criteria.

26. The status quo is no longer a viable option. Under the Regulations, the EPA currently retains the discretion to continue granting wholesaler permit applications beyond 2020, provided wholesalers supply the necessary information and meet the importation criteria. Even if no wholesaler permits were issued beyond 2020, New Zealand

legislation would still be inconsistent with requirements under the Montreal Protocol and liable to filing under its non-compliance procedure. Government intervention is, therefore, required to repeal the wholesaler permit category and remain compliant with the 2020 deadline set by the Montreal Protocol.

Alternative Options

27. The potential policy options have been assessed as follows:

(i) delayed entry-into-force of the proposed regulatory amendments to repeal wholesaler permits from 1 January 2019;
(ii) a reduced HCFC import quota through to 1 January 2030 as allowed under the Montreal Protocol's "servicing tail" provision;
(iii) a regulatory exemption for the fisheries sector alone (delayed entry-into-force of the proposed amendments to 1 January 2019);
(iv) cost recovery solutions for the fisheries sector; and
(v) repealed wholesaler permits from 1 January 2017.

Table 1, below, sets out the viability of each of the alternative options for meeting HCFC phase-out requirements under domestic and international law. Viability is defined by measuring each of the options against the five assessment criteria.

Table 1: Alternative options to phase-out HCFC wholesaler permits under the Ozone Layer Protection Regulations 1996, in accordance with the Montreal Protocol

Alternative option	Assessment criteria				
	Compliance	***Integrity***	***Administrative efficiency***	***Equity***	***Transition time***
(i) delay entry-into-force to 1 Jan 2019	✓	**X**	✓	**O**	**X**
(ii) reduced HCFC import quota (servicing tail provision)	✓	**X**	**X**	**O**	**X**
(iii) exemption for fisheries (delayed entry-into-force)	✓	**X**	**X**	**O**	**X**
(iv) compliance cost recovery solutions for fisheries sector	✓	✓	**X**	**O**	✓
(v) entry-into-force from 1 Jan 2017 (preferred option)	✓	✓	✓	**O**	✓

Key: ✓ = meets criteria **O** = partially meets criteria **X** = does not meet criteria

(I) Delay entry-into-force under the Regulations:

28. One option under consideration is to undergo the regulatory process to repeal HCFC wholesaler permits now, but delay entry-into-force of the amendments until the latest possible date for compliance with the Montreal Protocol, i.e. 1 January 2019. In theory, this would provide ample time for the amendments to be made and for remaining users of HCFCs such as fishing companies to transition to alternatives.

29. This option only fulfils the assessment criteria of *compliance* and *administrative efficiency*, as it meets requirements under the Montreal Protocol and requires only a brief, uncomplicated regulatory process. However, it has been discounted for failing to meet the other criteria of *integrity*, *equity* and *transition*.

30. First and foremost, the option fails to adhere to New Zealand's prior commitment to phasing out HCFCs, despite the policy intent of the Act and Regulations, and an overall minimal reliance on their industrial use. The option delays New Zealand's phase-out schedule even further beyond the original and publicly promoted target of 1 January 2015, which would compromise the Ministry's standing with industry groups that have already invested significantly to meet this target.

31. On the one hand, providing extra time for HCFC users that are likely to be disproportionately affected and financially impacted by the proposed regulatory amendments (i.e. fishing companies) would appear to satisfy the *equity* criteria. On the other hand, this option arguably does a disservice to the land-based industry, which has already replaced HCFCs, but could equally have benefited from an extended phase-out period. During consultation, a land-based industry representative group argued that the Ministry had misled industry regarding the final phase-out date, and the group felt let down having communicated false information to its stakeholders. Therefore, this option has been assessed as only partially meeting the *equity* criteria.

32. Option I risks encouraging the remaining HCFC users to delay making any required technological changes, only to encounter the same challenges in 2019. Two extra years would be a limited amount of time for the fishing industry to gather further resources in order to meet compliance costs. Likewise, it does not provide great incentive or demand for R-22 alternatives to begin being sold or developed more cheaply and abundantly in New Zealand. As such, the option fails the *transition time* criteria.

(II) Using the Montreal Protocol's servicing tail provision:

33. As noted earlier in para 13, the Montreal Protocol provides for a very small amount of HCFC imports to continue through to 1 January 2030 (at 0.5% of 1989 base level consumption). These imports would be restricted to the servicing of existing refrigeration and air conditioning equipment only. New Zealand could take advantage of this "servicing tail" provision using a permitting regime similar to the current one, but capping the total of available HCFC imports at the prescribed amount of 0.275 ODP tonnes, which is equivalent to 5 metric tonnes of R-22.

34. Despite meeting *compliance* requirements, the option does not reflect the policy intent of the Act and Regulations, nor of long-standing Government policy to phase out HCFCs by 2015, given it extends their importation and use to 2030. The *integrity* of New Zealand's HCFC phase-out schedule may, therefore, be undermined.

35. New Zealand has not integrated the Montreal Protocol's servicing tail provision within domestic legislation or the HCFC permitting regime. Although the option is available, it would likely require further separate amendments to the Act and the Regulations, as well as another fairly substantive consultation process. The implied regulatory burden (*administrative efficiency*) of this approach is considered to outweigh the benefits of such a marginal import quota, which would be especially difficult for the EPA to evenly or fairly distribute among wholesaler permit applicants.

36. Given land-based industry's strong objections to an extended phase-out, consultation would likely result in similar resistance to New Zealand's implementation of the servicing tail provision. Although it would provide a small concession for fisheries, the servicing tail would be of no benefit to those already using the available alternatives and, therefore, only partially satisfies the criteria for *equity*.

37. Such a small import quota would be insufficient for the servicing requirements of even one large commercial fishing company in New Zealand, let alone several companies at once, particularly if there is an accidental leakage of R-22 at any time. The assistance provided to users in terms of transitioning to the alternatives would be restricted to just a small number of vessels. Therefore, this option is also assessed as failing to meet the *transition time* criteria.

(III) Delayed entry-into-force of the amended Regulations for the fisheries sector:

38. Due to the higher complexity of replacing R-22 on vessels, the fishing industry is somewhat disproportionately affected by the proposed regulatory amendments. One option to ease the transition for affected vessel operators would be to provide them with an exemption, delaying entry-into-force of the proposed regulatory amendments to 1 January 2019 for fisheries only.

39. The option would meet the criteria for *compliance*, satisfying international phase-out obligations under the Montreal Protocol, wherein discretion is given to domestic jurisdictions to implement the phase-out obligations as they see fit. Therefore, New Zealand may choose to provide exemptions, subsidies or cost recovery solutions to distinct industries or sectors in order to complete its own HCFC phase-out, provided these do not breach the conditions imposed upon Parties to the Montreal Protocol. However, this option is not recommended as it fails to meet the remaining criteria of *integrity, administrative efficiency,* and *transition*, and only partially provides *equity*.

40. As in Option I, allowing HCFC imports to continue through to 1 January 2019, whilst permitted under the Montreal Protocol, is inconsistent with the policy intent of the Act and Regulations, and oversteps New Zealand's intended phase-out deadline (*integrity*). To delay the phase-out schedule for one sector alone would appear to contradict the rationale behind these initial policy decisions.

41. The option also carries with it a high regulatory burden, which would fail to meet the criteria for *administrative efficiency*. The process to amend the wholesaler permit category under the Regulations with a later phase-out date for fisheries would require careful deliberation and drafting, with potential further amendments required elsewhere in the Act and Regulations. It is also likely to incur a lengthy and controversial consultation process, as in Option II, with land-based industry groups expected to strongly oppose an extended phase-out, particularly as a sector-based exemption.

42. Option III seeks to address an existing inequity facing fisheries, that is, the difficulty of replacing HCFCs at sea. However, this option would effectively create another inequity by undermining land-based industry efforts to adhere to the phase-out, which (putting aside the technical oversight of wholesaler permits) was understood by all sectors as concluding on 1 January 2015. For this reason, Option III is assessed as partially meeting the *equity* criteria.

43. As in Option I, this option encourages a delay in the fishing sector's uptake of alternatives, potentially distorting the market and creating competitive advantages and disadvantages between companies and sectors. This would prevent New Zealand's overall HCFC phase-out from taking place in a prompt and cohesive manner (*transition time*).

(IV) Compliance cost recovery solutions for the fisheries sector

44. Another option to address the purported inequity or disproportionate economic impact on fisheries from the proposed regulatory amendments is for the government to provide cost recovery. Defined more generally as the method to recovering an expenditure which a business takes on as a direct result of regulatory compliance, cost recovery may be considered by government departments in order to foster greater compliance from businesses, particularly smaller ones faced with proportionately higher economic risk, if they:
    - are disproportionately affected by compliance costs associated with government legislation or regulation;
    - have a narrower revenue base over which to spread compliance costs;
    - lack in-house expertise or resources to meet compliance requirements; and/or
    - may be discouraged by regulatory complexity and the threat of penalties under non-compliance.

45. Option IV meets the criteria for *compliance* with the Montreal Protocol. It would also maintain consistency with the intent of the Act and the Regulations and proximity to New Zealand's 2015 phase-out schedule (*integrity*). Wholesaler permits could feasibly be repealed by the proposed entry-into-force date of 1 January 2017, as close as practicable to the original timeline without exceeding limits prescribed under the Montreal Protocol.

46. Nevertheless, the regulatory burden and fiscal cost (*administrative efficiency*) associated with this option alone are discouraging. It would be unclear and difficult to justify why the New Zealand Government should essentially provide private companies

and vessel operators with public funds in order to achieve regulatory compliance with international environmental best practice. This is despite the increased difficulty of replacing HCFCs on vessels, for which no one party is technically responsible. The legal framework and process in which to conduct such cost recovery solutions would be complex and time-consuming, and is likely to involve a lengthy consultation process, fraught with controversy and accumulative legal and political challenges. Furthermore, compliance costs would be subject to individual vessel size and configuration; therefore, determining an appropriate and practical cost recovery system for a highly diversified fisheries sector would be an immensely complex procedure.[5]

47. As with the previous three options, Option IV only partially meets the *equity* criteria. On the one hand, the fishing industry's transition to alternatives would clearly be aided by such cost recovery mechanisms. On the other hand, these appear imbalanced and problematic when they have effectively already been ruled out as an option for land-based industry. Consultation on this option would likely result in strong opposition, with land-based industry representing a large part of HCFC end users across New Zealand.

48. Nevertheless, the provision of cost recovery solutions for fisheries would effectively subsidise their transition to the available alternatives, thereby enabling an effective and cohesive HCFC phase-out across New Zealand and fulfilling the criteria for *transition time*. Notwithstanding the exclusion of land-based industry from cost recovery mechanisms, this option would prevent any distortion of the market and ensure that the variety of New Zealand industries involved are aligned with international standards, both in terms of business and environmental practice.

(V) Repealed HCFC wholesaler permits and imports by 1 January 2017

49. The approach originally consulted on with affected industry groups remains the preferred option: to repeal the wholesaler permit category in the Regulations from 1 January 2017 onwards, thereby phasing out all bulk HCFC imports indefinitely. While this option carries with it some economic impact on fisheries, it is necessary for New Zealand to remain in step with long-standing Government policy and international obligations under the Montreal Protocol. It also reflects the commitment already made by land-based industry to complete the phase-out in line with our domestic schedule and international trends.

50. The preferred option satisfies the aforementioned assessment criteria of *compliance*, *integrity*, *timeliness* and *transition time*, and partially meets the *equity* criteria. Option V easily meets the requirements for New Zealand's compliance with the Montreal Protocol, ceasing all HCFC wholesaler permits and subsequent importation by 1 January 2017, three years ahead of schedule.

51. The proposed regulatory amendments will enter into force as close as possible to the original 2015 target. Provided no wholesaler permits are granted in 2016, this will ensure that New Zealand has not imported any bulk new HCFCs beyond 1 January 2015, fulfilling the original policy intent established by the Act and the Regulations as

[5] It should be noted that the Ministry of Primary Industries is currently undertaking a review of cost recovery rules, including for fisheries, as part of the First Principles Review of Cost Recovery Arrangements (FPR).

close as practicable to the original timeline (*integrity*) and with minimal regulatory burden (*administrative efficiency*).

52. The Government has promoted the same 2015 target to all stakeholders equally, which have subsequently been working towards this timeline, fisheries included. However, the ability of individual companies and vessel operators to meet regulatory compliance costs and implement the changes will vary significantly, or in some cases be compromised. This is in contrast to land-based industry, which has successfully managed the transition away from HCFCs, albeit following significant investments. Ultimately, the preferred option has equal requirements but a disproportionate impact upon parties across all sectors, and so only partially fulfils the *equity* criteria.

53. Ideally, both land- and sea-based industry would be subject to the same market prices and conditions around available alternatives to ensure a smooth transition, even if the range of alternatives is somewhat reduced at sea. It is an inevitable consequence of the global HCFC phase-out that some older and/or smaller vessels will be incompatible with the more ozone-friendly alternatives. However, with this option, users are more promptly encouraged to be aligned with international best practice and changing global market conditions, satisfying the *transition time* criterion.

Consultation

54. The Minister and Cabinet agreed on a period of targeted consultation with affected wholesalers and industry groups (26 August-23 September), which was announced via press release (see **Appendix 1**) and on the Ministry for the Environment's website. The scope of consultation provided businesses with an opportunity to comment on the proposed phase-out date of 1 January 2017 and how they might be affected.

55. A total of five written submissions were received. In general, businesses identified no impact from the proposed regulatory amendments following the switchover to HCFC alternatives:

- One manufacturer indicated it did not use any HCFCs in any domestic appliances (either as refrigerant or as foam blowing agents) and that this was likely to also be the case for all domestic appliances imported into New Zealand.

- A bulk raw material importer voiced support for the phase out, given it had already begun selling HCFC alternatives successfully into the market place, and that any delays in the phase out would only delay the introduction of new technology.

- A submission from a land-based industry representatives group supported the immediate phase-out of wholesaler permits. The group argued that the continuation of wholesaler permits in the Regulations was contrary to the clear communication to both industry and the public, and against the intention of the Act and Regulations, adding that any user that has not planned for this should not be accommodated.

- Further feedback from land-based industry associations supported the full phase-out of HCFCs, including the end of wholesaler permits, given the ample time all of New Zealand industry has had to adopt the best practice alternatives.

- Another final submission from a foreign manufacturer requested the use of the servicing tail phase-out timetable to 2030, as prescribed under the Montreal Protocol. The submission suggested that the proposed phase-out date (1 January 2017) could introduce panic among consumers and subsequently raise the cost of goods, such as chicken and ice cream.

56. Therefore, of the submissions received, three fully supported the proposed regulatory amendments, one indicated there would be no impact either way, and another called for New Zealand to utilise the Montreal Protocol's "servicing tail".

57. During preliminary discussions with wholesalers, officials gathered that many fishing vessel operators had not yet transitioned away from HCFCs and were likely to be financially impacted by their full phase-out. Officials conducted further consultation with fishing companies in order to better understand this impact. These companies provided limited information and did not reveal the scale of current HCFC stockpiles, which are most likely reduced. Nevertheless, fisheries are aware of the environmental impact of HCFCs and are in the process of managing the switchover from R-22.

58. One fishing company contacted officials on the final day of consultation. The company indicated that it was fully aware of the impetus for phasing out HCFCs, but insisted this would be problematic considering the make-up of its own fishing fleet. Of the nine large deep-water vessels in its fleet, six are new and operate on ammonia-based systems, while the remaining three still use R-22. Two of the latter vessels using R-22 cannot be converted to ammonia or retrofitted with the available "drop-in" (ready-to-use) alternatives, while the cost of converting the remaining vessel to ammonia has been estimated at approximately NZ$900,000.[6] The company did not indicate what it had decided to do regarding its two non-convertible vessels.

59. Maritime New Zealand indicated on behalf of another fishing company that it is on the company's risk register to manage the R-22 switchover. Most larger fishing vessels these days only have R-22 for domestic refrigeration and air conditioning, i.e. not catch refrigeration, and 90% of the company's vessels fits this category. Replacing all crew refrigeration and air conditioning units would take some time and of course cost, but the company is working to manage this, which would be indicative of all NZ fishing vessels. The company noted the phase-out could be a bigger problem for smaller inshore vessels, whose limited size would make upgrading to alternative equipment either not possible or cost-effective, in which case they could be decommissioned. It is unclear how many vessels in New Zealand would fit into this category.

60. Discussions with a fisheries union representative indicated that, in addition to large commercial operators, members of local fishing circles were equally aware of the inevitable and obligatory HCFC phase-out, as well as their options to manage it. He noted that the phase-out had not been flagged as a particular point of concern or contention, and that the Government had taken the appropriate steps over time to alert the fishing industry to its obligations.

[6] This cost is considered to be relatively small on large deep-water vessels, given their high operating costs of approximately NZ$30,000-$40,000 per day.

61. In addition to industry consultation, departmental consultation was conducted as a requirement in drafting the Cabinet Paper and accompanying Regulatory Impact Analysis (RIA). The EPA, Maritime New Zealand, the Ministry for Primary Industries and the Ministry of Foreign Affairs and Trade were all consulted on the aforementioned policy decisions and have approved the content of each document.

Conclusions and recommendations

62. Proceeding ahead with the preferred option is the most recommended course of action, as it: satisfies New Zealand's compliance requirements under the Montreal Protocol; is consistent with previous policy positions and guidance promoted to industry; and provides the most equitable and efficient transition for all end users to HCFC alternatives.

63. The fact that the wholesaler permit category continues to be applicable under the Regulations is a technical oversight that must be corrected. However, it does not justify diverting from the original policy intent of the Act and the Regulations, or from New Zealand's planned phase-out trajectory, in order to delay economic impacts on one sector. This is especially true when other industry groups across a range of sectors have already borne these impacts out of early compliance.

64. As all developed countries are following the same HCFC phase-out timeline, new innovative on-board solutions and technological developments are happening all the time, which will further ease fisheries' transition to alternatives. We expect the economic impact of the proposed regulatory amendments to be relatively short-lived, with market adjustments in the short-term once HCFCs are fully phased out and there is more demand for alternative technologies. New Zealand users will then be better suited to an emerging global market in which HCFCs are no longer available.

65. It should be noted that there are uncertainties as to the exact scale of economic impact, that is, the exact number of vessel operators affected. Given the long-standing nature of the phase-out obligations, this impact is likely to be minimal, as most operators have already made or are prepared to make the necessary arrangements. There will be a small minority of users whose vessel size and/or configuration are unsuited to the proposed regulatory regime, but this was to be expected as an inevitable consequence of the global phase-out.

Implementation plan

66. The preferred option, in line with targeted consultation, proposes that the regulatory amendments enter into force on 1 January 2017. Following Cabinet approval, the legislative process would then take place throughout 2016, making the regulatory amendments fully applicable from the proposed entry-into-force date. No new wholesaler permits could be accepted for the 2018 calendar year onwards, thereby ceasing all bulk new imports of HCFCs into New Zealand.

67. As noted, end users of HCFCs in New Zealand are now believed to be few and far between. Once the proposed regulatory amendments are in place, wholesalers will no longer be able to import HCFCs, nor supply these to the remaining vessel operators

with R-22 (or similar HCFC) systems for servicing. Once stockpiles are exhausted, these operators will be required to use the available “drop-in” (ready-to-use) alternatives or to upgrade their systems as needed.

68. The Ministry for the Environment recently publicised targeted consultation on its website and in the official newsletter of the Institute of Refrigeration, Heating and Air Conditioning Engineers (IRHACE). This newsletter and similar industry publications will be useful media through which to promote the new regulatory regime, and alert end users to the termination of HCFC imports and availability of alternatives. For the fisheries sector, communications could be directed at the Deepwater Group Ltd., which represents 85-90% of deep-water quota owners, as well as Seafood NZ.

69. Likewise, the New Zealand Government will announce the regulatory changes via press release as officially completing New Zealand’s HCFC phase-out. The International Day for the Preservation of the Ozone Layer on 16 September 2016 would be an appropriate occasion to mark this accomplishment.

Monitoring, evaluation and review

70. The Minister for the Environment is required to table a report on the operation of the Act in the House of Representatives each year. This annual report is prepared by the EPA and reviews the progress of New Zealand’s phasedown of ozone depleting substances under the Act, including quantitative and qualitative analysis of New Zealand’s HCFC consumption. With wholesaler permits repealed and all bulk HCFC imports banned by 1 January 2017, New Zealand’s HCFC consumption will be nil.

71. Officials will continue to provide industry with information and policy guidance around alternative technologies emerging from the Montreal Protocol’s Ozone Secretariat, specifically from its Technology and Economic Assessment Panel (TEAP). Along with regular meetings of the Parties to the Montreal Protocol, the TEAP is an invaluable resource, providing New Zealand with evidence on worldwide progress to phase out ozone-depleting substances and on the increasing range and viability of alternatives.

Appendix 1: New Zealand Government press release on targeted consultation

Nick Smith **26 AUGUST, 2015**

Consultation on steps to ozone recovery and asbestos ban

The Ministry for the Environment will commence targeted consultation on the final steps to ban two substances with known risks to both the environment and human health, Environment Minister Dr Nick Smith announced today at the Society of Environmental Toxicology and Chemistry Australasia conference in Nelson.

“The Government has proposed new regulations banning the import of new bulk hydrochlorofluorocarbons and asbestos-containing products. Already New Zealand has all but phased out these substances so the number of businesses expected to be affected is low. The Ministry for the Environment will be contacting these businesses directly about the proposed regulations and work with them on alternatives,” Dr Smith says.

Hydrochlorofluorocarbons (HCFCs) are ozone depleting substances (ODSs) commonly used for products such as air conditioners, refrigerators and some foams. They contribute to damage of the ozone layer and increase ultraviolet radiation exposure, which harms the environment and people’s health.

“The regulations will complete the phase-out of HCFCs in New Zealand by removing a residual category of wholesale import permits. This will enable us to meet our commitment to phase out ODSs by 2020 under the Montreal Protocol ahead of schedule – which is fitting given New Zealand’s early championship of what is considered to be the most successful environmental protection agreement in the world,” Dr Smith says.

“The Government is also proposing to extend the ban on asbestos. Asbestos is a recognised carcinogen, poses risks of respiratory disease and is a leading cause of work-related disease and mortality. The importation of raw asbestos is completely banned already in New Zealand but there is currently no ban on products that contain asbestos, which would bring New Zealand’s regulations into line with that of many other countries.

“The use of asbestos-containing products is limited to the marine, aviation and electricity generation and supply industries. The Ministry will work with these industries that will be affected by the regulations as part of the targeted consultation process. An inventory released by the Ministry last year indicated that in most of these cases, alternative products were available,” Dr Smith says.

Information on how to make submissions are available from the Ministry’s website: www.mfe.govt.nz

Nick Smith Environment