# Regulatory Impact Statement
# Revision of New Zealand's Oil Pollution Levy

## Agency Disclosure Statement

This Regulatory Impact Statement has been prepared by the Ministry of Transport.

It considers the issue of New Zealand's capability to respond to any future marine oil spill. In particular, it provides an analysis of options to meet our international obligations in regards to oil spill preparedness and the recommendations of the New Zealand Marine Oil Spill Strategy 2015 -2019 (the Strategy) and the Capability Plan for Marine Oil Spill Readiness and Response (the Capability Plan).

The Oil Pollution Levy (OPL) collects funding, from all those within the marine sector who pose an oil spill risk, to be spent annually to provide a robust capability to fight oil spills in New Zealand waters, and to meet New Zealand's international obligations.

The current levy rate does not result in appropriate levels of funding to deal adequately with a future oil accident. This Regulatory Impact Statement considers the increase in revenue needed for the New Zealand Oil Pollution Fund (the Fund), through the OPL, to enable the preferred option.

The nature of the costs and benefits arising from the options can be readily identified. However, it is not possible to completely quantify how an alternative based model of levy setting would perform compared to the current risk based method. Instead we have relied on estimates of the likely impact on individual participants to give some indication of magnitude. The analysis has been informed by the views of industry through consultation. The Oil Pollution Advisory Committee (OPAC), which is a statutory committee of industry and government representatives, was also involved in the consultation process.

The current methodology, Marine Oil Spill Risk Assessment (MOSRA) 12, is the basis of the current levy rates for participants in the sector, based on the level of risk each participant represented in the event of an oil spill. A new methodology, MOSRA 15, has enabled a more accurate calculation of risk with the consequent opportunity to reflect these new risk profiles through the levy rate. This will result in some sector participants being required to pay a lower levy rate and some a higher rate.

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## Context

1. New Zealand is a party to the International Maritime Organization's International Convention on Oil Pollution Preparedness, Response and Co-operation 1990 (OPRC). This requires New Zealand to establish and maintain a national system for responding to oil pollution incidents.

2. The Maritime Transport Act 1994 (the Act) provides the statutory basis for New Zealand's oil pollution preparedness and response system. The Act:
    a. tasks Maritime New Zealand (Maritime NZ) with ensuring New Zealand is prepared and able to respond to marine oil spills
    b. requires a marine oil spill response strategy to be in place
    c. establishes a three tiered (national, regional, and ship and site) oil spill contingency planning regime
    d. establishes the Fund to meet the costs of the response system
    e. provides for the imposition of oil pollution levies to provide revenue for the Fund.

3. Maritime NZ has enhanced the response system over time to reflect a growing understanding of New Zealand's oil spill risk profile, experience gained from oil spill incidents and exercises, and scientific and technological developments.

4. New Zealand's response capability includes $15 million of equipment held at Maritime NZ's Marine Pollution Response Service (MPRS) in Auckland and in local caches held by regional councils around the country.

5. A small expert response team is located at MPRS. Support is available from within Maritime NZ and from some 400 trained external personnel nationwide. Maritime NZ is responsible for spill response training.

## Status Quo

6. The current capability and funding levels for the MPRS were determined in 2012, based on a 2010 independent report "Review of New Zealand's Oil Pollution Preparedness and Response Capability" by Thompson Clarke Shipping. The Review confirmed the need for around $4.56 million to be spent annually to provide a robust capability to fight oil spills in New Zealand waters, and to meet New Zealand's OPRC obligations. It also identified a number of gaps in capability that could be remedied by purchasing additional in-shore spill response equipment, including booms and skimmers.
7. A review of the OPL to set levy rates to fund this capability was consulted on in 2012, and resulted in new rates set in 2013.
8. The Oil Pollution Levies Order 2013 (the Order) implemented a levy structure comprising:
    a) a "baseline" levy to collect the $4.6 million in revenue necessary in order for the Fund to meet the full cost of maintaining MPRS capability
    b) a "capital equipment" levy of $0.6 million per annum for three years to meet the cost of the additional response equipment recommended in 2010
    c) a "capability" levy of $0.4 million per annum over three years to implement training and capability needs identified through an internal Maritime NZ review and *MV Rena* incident response debriefs.
9. The OPL rates under the Order apportion levy contributions for each industry sector as determined by MOSRA10 as updated in 2012. This assessment of MOSRA was conducted by risk management specialist Navigatus Consulting Limited and is updated regularly. This risk assessment methodology uses the likelihood and consequence of a potential oil spill to calculate risk per sector, and thereby apportion a levy rate for the sector.
10. The 2013 review of the OPL established a cycle of three-yearly reviews to ensure that value for money and effective response capability are maintained, identify equipment or capability gaps and, if necessary, factor these considerations into revised levy rates.

***Developments since the Order was made***

*Reviews of preparedness and response capability*

11. The Act requires Maritime NZ to review the New Zealand Marine Oil Spill Strategy at least once every five years.
12. The New Zealand Marine Oil Spill Strategy 2015 -2019 (the Strategy) revises its predecessor to take into account lessons from the *MV Rena* incident, incidents overseas, domestic and international shipping trends, offshore oil and minerals activity, and international best practice.
13. Maritime NZ has developed the Capability Plan for Marine Oil Spill Readiness and Response (the Capability Plan). The Capability Plan describes the additional

capabilities Maritime NZ needs to give effect to the Strategy, considers the findings of the updated MOSRA 15 and identifies asset replacement requirements necessary to achieve the oil spill readiness and response objectives of the Strategy.

14. Both the Strategy and Capability Plan highlight the need for New Zealand to be able to respond to significant spills, which are of low probability but high impact, such as the *MV Rena* incident.

15. The International Tanker Owners Pollution Federation (ITOPF)[1] provided an independent evaluation of the Capability Plan. ITOPF considered that Maritime NZ's assessment of capability requirements, and its capital and operational cost estimates under the plan, are well considered and reasonable.

*Risk profile update*

16. MOSRA 15 incorporates significant improvements, including better quality data on oil types and volumes actually shipped and used, better information on vessel activity (from vessel tracking data) and improved modelling of marine oil spill consequences. MOSRA 15 is far more effective than previous assessments at modelling the effect of winds, currents and sea temperature on potential oil spills.

17. This work has significantly altered the previous risk assessment and the risk profiles of industry sectors, which are expressed as percentage 'shares' of overall risk.

18. For four sectors, the changes are significant – foreign tankers' and domestic tankers' shares rise markedly and the sector share for foreign passenger and cargo ships falls markedly.

*MPRS cost increases*

19. The OPL budget for 2016/17 shows that the business as usual costs of the MPRS exceed the $4.6 revenue target that was set in 2013 for the OPL baseline levy. The increase reflects movements in operating costs, including personnel, fixed contracts, specialist services and communications, and the cost to maintain the additional capability established through the three-year Capability component of the current levy.

## Problem definition

20. The scheduled review of the OPL took into account the revised Strategy and the review of required capability as outlined in the Capability Plan. These documents identified that an increase in funding is necessary to maintain New Zealand's marine oil spill response capability in the future.

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1 ITOPF members are tankers owners, and associates include other ship owners and oil pollution insurers. It is the maritime industry's primary source of objective technical advice, expertise, assistance and information on effective response to ship-source pollution.

21. The Capability Plan identifies capabilities necessary to give effect to the Strategy, focusing on three core elements:
    - capability sustainment: to maintain the level of capability afforded by the current base levy and the interim capital equipment and capability levy components
    - asset replacement: for equipment, including dispersant, that is at, or beyond, its designed service life
    - capability development and enhancement: focusing on filling in current gaps or shortfalls in capability.
22. The Capability Plan identifies asset replacement and capability sustainment as the minimum requirements to be addressed.
23. The Capability Plan also identifies options to address gaps in current capability to respond to incidents occurring further out to sea and improve response capability for large, national-level, oil spill incidents (Tier 3).
24. The problem comprises two dimensions:
    1. It is necessary to determine the level of capability most appropriate to address the three core elements of the Capability Plan.

       Any increase in capability will require additional expenditure from the Fund, which will require an increase in the OPL, as will the increase in MPRS operating costs.
    2. MOSRA 15 significantly alters the sector risk allocations on which OPL rates under the existing Order are based.

       It will be necessary to amend the Order to reflect the MOSRA 15 risk allocations, irrespective of any change to the overall OPL revenue requirement.

## Objectives

25. The public policy objectives as identified by the Review of the Oil Pollution Levy 2015/16 are:
    - to have a robust preparedness and response capability to mitigate marine oil spills
    - to meet New Zealand's OPRC obligations.
26. Specific oil spill response capability objectives are:
    - current equipment and capability to respond to oil spills is maintained
    - New Zealand's in-shore and estuaries and harbours are protected in the event of a spill, reducing the consequences of the spill and reducing response costs overall

- New Zealand's oil spill response is effective and efficient, reducing spill impacts on people and the environment and reducing overall spill response costs
- oil spills can be managed farther out to sea, close to the source, better protecting the shoreline from spill impact and reducing response costs overall
- technical and scientific knowledge about oil spill response is improved, supporting more effective responses
- cost to businesses are minismised as much as possible.

## Assumptions

27. Throughout the analysis, the following key assumptions have been made:

    a) Maritime NZ's assessments of capability requirements and estimated costs, as independently reviewed by ITOPF, are accurate

    b) the proportions of oil spill risk that MOSRA 15 has calculated for each industry sector are correct

    c) the volume of oil carried by oil tankers will be static over the life of the levy proposal, on the basis that recent increases in volume reflect the fall in oil price rather than intrinsic demand increases, with potential further increases offset by potential falls, if oil prices rise again.

## Options and impact analysis

### Capability options

*The status quo is not a viable option*

28. Maintaining the current approach for funding New Zealand's oil preparedness and response is not sustainable. The Capital Expenditure and Capability components of the current OPL cease on 30 June 2016 and the current amount collected, if the OPL were to continue, would not be sufficient to maintain an adequate level of capability. In particular:

    - the current baseline OPL target no longer meets the full operating costs of the MPRS
    - equipment in the current inventory has met, or will soon meet, the end of its useable life
    - the MPRS needs to maintain the capability improvements funded by the capital expenditure and capability levies under the current Order
    - the current response capability is well suited to near-shore spills but there is no ability to respond to spills further out to sea.

29. The status quo is therefore not considered a viable option because it will result in an erosion of oil spill response capability, will not address identified gaps in capability, and would compromise New Zealand's ability to meet its international obligations as a party to the OPRC.

*Analysis of the capability options*

30. In determining the preferred approach to addressing New Zealand's oil spill preparedness and response needs, four capability options were considered. Tables 1 and 2 provide an analysis of the options.

31. **Option A** equates to New Zealand's existing oil spill response capability. It is well suited to oil recovery in harbours and sheltered waters. The oil spill equipment is not of the type, construction or size for use in unsheltered or offshore waters. The capital investment under Option A ($1.350m per annum) addresses equipment obsolescence but does not address the gap in offshore response capability.

32. **Option B** provides for some improved ability to respond to offshore oil spills through equipment procurement and better training. Had Option B been in place for the *MV Rena* incident, a slightly enhanced capability would have been available to contain and recover oil offshore (during appropriate sea conditions).

33. **Option C** provides a moderate enhancement to New Zealand's oil spill capability. Had this option been in place during the *MV Rena* incident, the response would have been more effective. This is because Option C sees the purchase, for the first time, of coastal waters recovery systems that are also capable of operation farther from shore. In addition, Option C will address the obsolete equipment earlier and provide incremental improvements for near shore activities.

34. **Option D** delivers the capability of Option C, plus an additional coastal waters recovery system and further improved ability to prevent oil from reaching the shoreline from offshore incidents. Option D delivers the ability to apply more dispersant for longer, before needing to source additional supplies from overseas, and improves readiness and resilience through more personnel with greater skills and better equipment to sustain a longer or larger response. The increase in annual revenue under Option D would allow capability to build up earlier.

***Options for revising the OPL to meet capability funding requirements***

35. To enact any of the options, a new Oil Pollution Levies Order will be necessary to implement revised OPL rates that generate additional revenue to fund the chosen option.

36. The risk-based approach used to set OPL rates ensures that industry sectors which present the greatest risk – representing both likelihood and consequence - of an oil spill contribute proportionally to the cost of New Zealand's spill response system.

37. The MOSRA, which informs the risk-based OPL rates, is a well-established risk assessment methodology that has evolved through multiple iterations since 1992 using statistical methodology representing international best practice.

38. In the 2012/13 review Maritime NZ consulted on the continuing use of the MOSRA model to allocate the levy as opposed to an alternative threat-based model. The response from stakeholders that were consultation was that they did

not object to the continued use of the risk-based model. Existing OPL rates reflect the sector risk profile from 2012.

39. MOSRA 15 has produced a risk profile that shows a large increased risk share for foreign and domestic oil tankers and a large reduction in the risk attributable to foreign-going cargo and passenger ships. Risk shares for the domestic cargo passenger and fishing sectors have also reduced, though these sectors comprise a relatively small proportion of the total risk profile.

40. Applying the MOSRA 15 risk profile to the OPL will increase the oil tanker sector's levy share by almost 50 percent (to 75 percent) and reduce the foreign cargo and passenger share by 24 percent (to 10 percent). This means that, as well as paying 75 percent of baseline OPL, the tanker sector will pay 75 percent of the additional levy under any of the four capability options.

41. Each revision of the MOSRA involves complex processes to calculate the oil spill risk based on the best information available at the time. MOSRA 12, in the absence of more precise information, relied on general assumptions about the types of oil that were carried around the New Zealand coast. MOSRA 15 was able to access data on the actual amounts of each type of oil carried, enabling calculations that are far more accurate.

42. The different levy rate for the different sectors is the result of more accurate data. The calculations are a reflection of both the risk, and the implications of, an oil spill to New Zealand.

43. The MOSRA 15 calculation is determined by the amount and type of oil carried, and the likelihood of an oil spill occurring. This leads to a distribution of cost based on the principle of the 'potential polluter pays', and takes into consideration the risks and implications if an incident should occur. For example, although a fishing vessel may be more likely to spill oil, the consequences of the spill are likely to be minimal. However, a tanker may have less risk of spilling oil, but if it were to spill oil, the implications would be significant.

44. The MOSRA 15 calculation also has a better understanding of oil movements around New Zealand. For the first time we have data to show a higher rate of non-persistent oil[2] movement by domestic tanker along the New Zealand coast. This has led to large levy increase for tankers that carry non-persistent oil as cargo, as it represents a greater percentage of the cargo. Domestic tankers that carry persistent oil see a moderate decrease in the levy.

45. By ignoring the more up to date and accurate data now available from MOSRA 15, retaining risk allocations based on MOSRA 12 would unfairly levy shares across the sectors.

[2] Examples of non-persistent oil are gasolines, aviation fuels and distillates

**Table 1: Analysis of options against oil spill response objectives as identified in the Review of the Oil Pollution Levy 2015/16**

| Spill response objectives | Achieved by | Option A | Option B | Option C | Option D |
|---|---|---|---|---|---|
| **The current equipment and capabilities to respond to oil spills is maintained** | Out of date equipment is replaced, current contracts are maintained (aerial response, modelling), current staffing and training levels are retained | ✓✓✓✓ | ✓✓✓✓ | ✓✓✓✓ | ✓✓✓✓ |
| **New Zealand's in-shore and near-shore areas are protected in the event of a spill, reducing the consequences of the spill and reducing response costs overall** | Sub-sea oil plumes and gas clouds can be modelled, to predict where oil or gas may go and so support more effective measures to prevent it from reaching the shoreline | ✓✓✓✓ | ✓✓✓✓ | ✓✓✓✓ | ✓✓✓✓ |
| | Oil spill control agents can be used to disperse oil before it reaches the New Zealand shoreline through aerial dispersant application reducing the costs of the response by preventing or reducing shoreline impact | ✓ | ✓✓ | ✓✓✓ | ✓✓✓✓ |
| | Oil can be recovered on-water in shallow areas close to the shore, preventing oil from reaching the shore, reducing the costs of the response | ✓ | ✓✓ | ✓✓✓ | ✓✓✓✓ |
| | Tracking of oil spills and the effects of dispersant through tracking buoys/flurometry allows response measures to be better tailored to the specific circumstances | x | x | x | ✓✓✓✓ |
| | Additional stockpiles of dispersant allow for longer periods of continuous operations before relying on overseas stockpiles, enabling more rapid dispersal of oil for dispersible oils, reducing the volumes that might reach the shoreline | x | x | x | ✓✓✓✓ |
| **New Zealand's oil spill response is effective and efficient, reducing spill impacts on people and the environment and reducing overall spill response costs** | National Response Team training is delivered at 2013 levels maintaining a baseline capability for major, national level spills | ✓✓✓✓ | ✓✓✓✓ | ✓✓✓✓ | ✓✓✓✓ |
| | National Response Team training is enhanced to meet the goals and objectives of the revised National Marine Oil Response Strategy giving improved readiness for response and more effective spill responses at the national level | x | x | x | ✓✓✓✓ |
| | Incident Management System maintenance and improvements support effective response planning and efficient financial management of large-scale, enduring responses | ✓ | ✓✓ | ✓✓✓ | ✓✓✓✓ |
| **Oil spills can be managed farther out to sea, close to the source, better protecting the shoreline from spill impact and reducing response costs overall** | Coastal on-water containment and recovery systems enable the management of oil spills farther from shore in less-sheltered waters and even offshore in benign weather conditions reducing the costs of the response by preventing or reducing shoreline impact | x | ✓✓ | ✓✓ | ✓✓✓ |
| | Contracts with 'vessel of opportunity' provide the ability to deploy equipment far from the shore when necessary, significantly increasing latent capacity to undertake response measures away from the shoreline | x | ✓ | ✓✓ | ✓✓✓ |
| **Technical and scientific knowledge about oil spill response is improved** | Additional positions established supporting the improvement of international relationships and core technical and scientific knowledge plus maintenance of new equipment items improving skills and knowledge and thus response effectiveness | x | ✓ | ✓✓ | ✓✓✓ |
| **Cost to businesses are minimised** | Provide a meaningful increase in oil spill response capability, while managing the financial burden on the maritime sector. | ✓ | ✓✓ | ✓✓✓ | ✓✓✓✓ |

**Table 2: Options to address the problem identified**

| | Option A<br>$6.520m<br>(+17% from 2013 rate)<br>Base Levy ($5.170m per annum)<br>+ Capability Levy ($1.350m per annum) | Option B<br>$7.541m<br>(+35% from 2013 rate)<br>Base Levy ($5.170m per annum)<br>+ Capability Levy ($2.371m per annum) | Option C<br>$8.049m<br>(+44% from 2013 rate)<br>Base Levy ($5.170m per annum)<br>+ Capability Levy ($2.879m per annum) | Option D<br>$8.852m<br>(+58% from 2013 rate)<br>Base Levy ($5.170m per annum)<br>+ Capability Levy ($3.682m per annum) |
|---|---|---|---|---|
| ***Overall Capability Effect:*** | Maintains capability at 2015/16 levels. ⊖ | Limited, incremental capability increase over 2015/16 levels. ↑ | Moderate, incremental capability increase over 2015/2016 levels. ↑↑ | Significant, incremental capability increase over 2015/16 levels. ↑↑↑ |
| ***Equipment:*** | 95% of the assets at the end of life replaced, no additional equipment. No capability in coastal recovery systems. ⊖ | 95% of assets at end of life/obsolete replaced, some new equipment. ↑<br>New, larger workboat. ↑<br>Address obsolescence in 6 years. ↑ | 100% of assets at end of life/obsolete replaced/significant new equipment. ↑↑<br>One full coastal system with further additional equipment for near-shore and in-shore. ↑↑<br>Address obsolescence in 3 years. ↑↑ | 100% of assets at end of life/obsolete replaced, major new equipment + systems. ↑↑<br>Two full coastal system with further additional equipment for near-shore and in-shore. ↑↑↑<br>Increase dispersant stocks. Effectiveness monitoring of Dispersant Applications Systems. ↑↑ |
| ***Training and exercises:*** | Current level of readiness, skills and knowledge and personnel numbers maintained. ⊖ | Improved readiness, skills and knowledge, more resilience, stronger wildlife support. ↑ | Further increase to wildlife readiness and responses capability. ↑↑ | Slight increase to Wildlife capability, significant increase to NRT capability. ↑↑↑ |
| ***People and Organisation:*** | Current staffing levels at MPRS maintained. Current organisational systems and processes maintained. ⊖ | Increase in core FTE supports re-equipment programme, able to up-skill and develop relationships. ↑ | Further increase in core FTE supports operations and planning, up-skilling and relationships. ↑↑ | Further increase in core FTE for environmental skills, earlier build up of capabilities. ↑↑ |
| ***Specialist contracts:*** | Current contracts maintained, engagement and relationships at current level. ⊖<br>Reduced training budget for Aerial Observation/Aerial Dispersant. ↓<br>No capability for vessels of opportunity. ⊖ | Slight reduction in aerial contract costs subsidises initial vessel contracts – important new capability. ↓<br>Reduced training budget for Aerial Observation/Aerial Dispersant. ↓<br>Basic capability in regards to vessels of opportunity. ⊖ | Current contracts maintained plus initial vessel contracts for a new capability. ⊖<br>Return to current funding level for Aerial Observation/Aerial Dispersant. ⊖ | Current contracts maintained. ⊖<br>Significant vessel contracts put in place earlier. ↑↑ |

## Statutory compliance

46. The Maritime NZ Authority (the Authority) considers that Option C provides the appropriate balance between oil spill response objectives and cost, and that the levy changes to meet the costs of Option C should be based on the revised sector risk allocations of MOSRA 15.

47. Pursuant to section 333(4) of the Act:

    - the Authority requested on 7 June 2016 that the Minister of Transport recommend OPL levy amendments to give effect to the necessary levy changes
    - the Authority has consulted the OPAC on the proposed levies
    - the Minister has considered the Authority's request and is satisfied that the planned expenditure from the Fund under Option C is reasonable and the levies will enable the expenditure to be met without reducing the level of financial reserves below that established under section 332(6).

48. The use of the MOSRA 15 sector risk analysis to assign levy shares to different industry sectors conforms with the authority to fix levies based on different levels of risk under section 335(2).

## Cost to Business

49. The changes in sector risk presented by MOSRA 15 mean every option will result in relatively large levy increases for oil tankers, and decreases for passenger, cargo ships, and domestic fishing vessels. An analysis of the cost to business for each option is provided below in Table 3.

**Table 3: Cost increases, per sector, for each option**

| | Cost to Businesses | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Foreign | | | Domestic | | | | | | | |
| | Tankers – oil carried as cargo: persistent oil | Tankers – oil carried as cargo: non-persistent oil | Passenger, Cargo and Tanker Bunker Fuel | Tankers – oil carried as cargo: persistent oil | Tankers – oil carried as cargo: non-persistent oil | Passenger, Cargo and Tanker Bunker Fuel | NZ Fishing Vessels | Platforms | FPSOs | Pipelines | Exploration wells |
| **Option A** | ↑ | ↑↑↑ | ↓↓ | ↓↓ | ↑↑↑↑ | ↓ | ↓↓ | ⊖$45,849 | ⊖$210,000 | ⊖$36,460 | ⊖$17,904 |
| 2016 Cost | $2,759655 | $987,267 | $697,740 | $305,332 | $854,926 | $644,163 | $56,704.00 | 0% | 0% | 0% | 0% |
| % change | 12.2% | 111.5% | -66.3% | -46.8% | 292.5% | -5.9% | -50.5% | N/C | N/C | N/C | N/C |
| Δ from 2013 | $879,499 | $510,364 | $876,255 | $45,025 | $635,094 | $77,159 | $80,691.00 | | | | |
| **Option B** | ↑ | ↑↑↑ | ↓↓ | ↓ | ↑↑↑↑ | ↑ | ↓↓ | ⊖$45,849 | ⊖$210,000 | ⊖$36,460 | ⊖$17,904 |
| 2016 Cost | $3,210,290 | $1,043,785 | $811,677 | $355,190 | $994,530 | $749,351 | $65,963.50 | 0% | 0% | 0% | 0% |
| % change | 30.2% | 145.5% | -60.9% | -34.7% | 355.7% | 9.2% | -42.5% | N/C | N/C | N/C | N/C |
| Δ from 2013 | $1,324,134 | $656,882 | $768,318 | $4,834 | $774,698 | $28,029 | $71,431.00 | | | | |
| **Option C** | ↑ | ↑↑↑ | ↓↓ | ↓ | ↑↑↑↑ | ↑ | ↓ | ⊖$45,849 | ⊖$210,000 | ⊖$36,460 | ⊖$17,904 |
| 2016 Cost | $3,435,830 | $1,117,117 | $868,701 | $380,144 | $1,064,401 | $801,997 | $70,597.76 | 0% | 0% | 0% | 0% |
| % change | 38.8% | 161.8% | -58.3% | -34.2% | 385.8% | 16.4% | -38.7% | N/C | N/C | N/C | N/C |
| Δ from 2013 | $1,549,675 | $730,213 | $705,294 | $29,787 | $844,569 | $80,674 | $80,674.04 | | | | |
| **Option D** | ↑↑ | ↑↑↑ | ↓↓ | ↓ | ↑↑↑↑ | ↑ | ↓ | ⊖$45,849 | ⊖$210,000 | ⊖ | ⊖$17,904 |
| 2016 Cost | $3,792,339 | $1,233,033 | $958,841 | $419,589 | $1,174,847 | $885,215 | $77,923.26 | 0% | 0% | $36,460 | 0% |
| % change | 52.6% | 187.7% | -54.1% | -27.7% | 434% | 28% | -32.6% | N/C | N/C | 0% | N/C |
| Δ from 2013 | $1,906183 | $846,129 | $615,154 | $69,233 | $955,015 | $163,892 | $ 59,471.53 | | | N/C | |

## Cost to consumers

50. Although the table indicated large absolute increases to the domestic and foreign oil tanker sector, the increase per litre of oil for consumers will be minimal. Table 4 outlines the increased costs for consumers.

### Table 4: Anticipated Cost to Consumers

| **Barrels per day usage** | | | | |
|---|---|---|---|---|
| **Total barrels per annum (MBIE – 2014 Energy in NZ)** | | | | 45,588,500 |
| **Converted to Litres p.a.** | | | | 7,247,978,850 |
| **Calculation of increases to oil costs per litre from OPL Levy** | | | | |
| **Option** | **A** | **B** | **C** | **D** |
| **Increase in OPL ($) for Domestic and International Tankers Oil Industry** | $1,980,000 | $2,751,000 | $3,095,000 | $3,638,000 |
| **Increase per litre to vehicle fuel from OPL** | $0.0003 | $0.0004 | $0.0004 | $0.0005 |

**Note:**

1. This is a rough estimate based on publicly published data - All refined oil products consumed.
2. The outcome is a cost impact of "hundredths of a cent" per litre.
3. It excludes any consideration of oil used in an unrefined state, or any issues based on loss of volume due to the conversion of crude oil to refined product.

## Preferred option

*The preferred option is Option C*

51. Given the improved methodology with a fairer distribution of cost and the low level of impact to the consumer, the preferred option is C.

52. Option C comprises a Baseline Levy of $5.17 million per year (which is the same under all options) and a Capability Levy of $2.879 million per year. The total levy target is $8.049 million per year. This is a 44 percent increase over the $5.6 million target set in 2013 for the current Base Levy, together with the existing Equipment and Capability Levy components that expire on 1 July 2016.

53. Option C proposes $6 million of asset replacement in the first three years. The asset replacement includes booms, skimmers, pumps, workboats, support equipment and dispersants.

54. Option C also provides greater capacity to respond to oil spills in the near-shore environment and fund two quick-deployment boom systems for Marsden Point and the Port of Taranaki. These two areas have a high volume of tanker movements. A spill from a tanker at either location could be large, with significant environmental consequences.

55. Maritime NZ considered that conducting asset replacement at a faster rate than under Option B was preferable. It would reduce the short-term risks to New Zealand in the case of a marine oil spill in the next six years.

56. Maritime NZ currently holds minimal national stockpiles of containment (booms) and recovery equipment (skimmers). Option C delivers twice as many booms and skimmers as Option B, so would provide better protection for shorelines subject to high-energy sea conditions, such as the West Coast of New Zealand, in the event of a spill.

*Option A would not address recommended changes from the review of the Rena incident*

57. Option A would not allow for an increase in readiness and response capability as recommended in the independent review of the Rena incident.

*The financial implications for the sector of Option D are too large*

58. Option D would deliver full implementation of the Capability Plan at the end of six years. This option has considerable merit but it is not the preferred option because of the considerable financial implications for the industry, in conjunction with the views of OPAC on the relative merits of Options D and C.

*The timeframe for Option B presented a risk*

59. Option B would provide improvements in response capability, but would deliver asset replacement of the current equipment-based response capabilities slower than Option C.

60. Equipment replacement under Option B would take six years, rather than three under Option C. Doubling the time to renew equipment will increase the risk of an oil spill occurring before equipment is replaced. Equipment that is past its end-of-life is more likely to underperform or fail. It could also present health and safety risks to staff, which would hinder or prevent its use. Option B would also only fund booms for one of Marsden Point or the Port of Taranaki.

## Consultation

*Consultation with OPAC and industry*

61. Alongside the public consultation, OPAC was formally consulted as required in the Act. OPAC is chaired by the Director of Maritime NZ and has representative membership (appointed by the Minister of Transport) as follows:

    - New Zealand Shipping Federation
    - Fishing Industry (including Seafood Industry Council)

- Major oil companies
- Oil distribution and exploration (Petroleum Exploration Association NZ) industries
- NZ Association of Ship Owners and Agents (Shipping NZ)
- NZ government officials (Ministry for the Environment, Department of Conservation, Te Puni Kōkiri, Ministry of Transport).

62. On 28 August 2015, Maritime NZ presented the Capability Plan, the ITOPF Independent Review of the Capability Plan, a draft levy proposal, and the MOSRA 15 to OPAC members. At this meeting, Navigatus Consulting Ltd also gave a presentation on MOSRA 15.

63. OPAC was happy with option C as the proposed approach. However, some members of OPAC raised concerns about MOSRA 15 and basing the sector levy allocations on this methodology. OPAC recommended that MOSRA 15 be reviewed in three years.

64. In November 2015, Navigatus Consulting Ltd presented MOSRA 15 to a group of oil importers and oil tanker operators and answered questions about the methodology used.

*Public consultation*

65. Maritime New Zealand released a public consultation document, *Review of the Oil Pollution Levy 2015/16 – Consultation Document*, in March 2016. Ten submissions were received. All submitters acknowledged the importance of New Zealand having suitable marine oil spill response capability and the need for all industries involved to contribute to the levy, but differed in their views on the amount of total levy required to achieve that goal.

66. Of the five submitters who indicated a preference, two preferred Option A, one preferred Option B and two preferred Option D.

67. Overall, the key issues raised by submitters were as follows:

    - the methodology of MOSRA 15. In particular, the use of global incident rates for the New Zealand context, given our different conditions and safety requirements. Global data was used to calculate risk due to the fundamental problems that would arise if a small data set – such as that of oil spills that have occurred in New Zealand waters – was used.
    - the risk allocation between industries, in particular the high risk allocated to foreign and domestic tankers and the low risk allocated to oil exploration, general cargo, container, cruise ship sectors and fishing vessels. It was argued that this risk allocation failed to recognise the investment from the industry in securing

against an oil spill. It was further argued that this has the added effect of reducing the incentives for these industries to reduce their oil spill risks. The MOSRA calculation of risk involves the likelihood of an oil spill multiplied by the potential consequences of an oil spill. This means that the incident data that is used (and the likelihood of an incident that this is used to calculate) is only one factor in the risk. The consequences calculation is determined by the amount and type of oil carried. As the tanker sector carries far more oil than any other industry, the risk is significantly higher, reflected in the risk allocation.

- the reallocation of risk, in the domestic tanker sector, from persistent oil to non-persistent oil, despite the apparent reduced risk represented by non-persistent oil. In response it was noted that the original calculation from the 2012 Sector Report was done on the basis of general assumptions about the types of oil that were carried. MOSRA 15 uses data on the actual percentages of each type of oil that is carried around the New Zealand coast, enabling calculations that are more accurate.

## Conclusions and recommendations

68. We recommend that Option C be implemented. Having a comprehensively resourced oil spill response preparedness and capability is important for New Zealand. Independent reviews undertaken suggest that the response service provided is cost-effective and thorough, but that more equipment and increased capability is required.

69. New Zealand is required, as a party to the International Maritime Organization's International Convention on Oil Pollution Preparedness, Response and Co-operation 1990, to prepare for and respond to oil spills in the marine environment. Key to fulfilling this obligation is ensuring the Fund provides a sustainable revenue base to allow the Government to maintain oil spill preparedness and response services at appropriate levels. Key too is an effective, efficient and equitable levy mechanism that apportions the cost of the services between industry participants and their risk profiles.

70. We also recommend that the analysis and review of the OPL and the Fund due to be completed in three years is undertaken as planned, and that OPAC continue to monitor the spending of the Fund.

## Implementation

71. A new Order in Council will be required to increase the level of revenue raised. It is intended that this be in place from 1 October 2016.

72. If the Order in Council is not in place by 1 October 2016 the existing base levy will continue to be collected. The interim equipment and capability levies that the current Order provides for will expire on 30 June 2016. Base levy revenue will meet MPRS operating costs in the meantime but will be insufficient to fund equipment replacement and additional capability costs once the interim levies have expired.

73. Due to previous revisions of the OPL, implementation of any changes will not be significant. There will need to be minor changes to Maritime NZ's finance systems to account for the new rates and levy payers will need to be notified of the changes.

74. Levy payers who pay on an annual basis will have already been invoiced for 2016/17 period based on the levy as at 1 July. These levy payers will need to be re-invoiced, due to the levy changes taking effect in October, as opposed to at the start of the financial year. This is a small administrative detail.

## Monitoring, evaluation and review

75. A three-yearly review of OPL means that the next review will occur in 2018/19. This review will allow for changes in shipping activity and associated risks to be reflected in levy rates. Maritime NZ will continue to monitor volume changes for revenue and levy rate implications.

76. The review scheduled for 2018/19 will also provide an opportunity for Maritime New Zealand to address the concerns raised by OPAC in regards to the MOSRA 15 methodology.

77. Alongside this review, Maritime NZ undertakes an oil pollution preparedness and response capability review every five years. These reviews update and clarify the type, location and amount of oil spill services needed to fulfil New Zealand's oil pollution response obligations and the amount of expenditure required (and therefore Levy revenue needed). The subsequent action plan then assesses the costs (or savings) associated with any change in New Zealand's preparedness and response regime.