Ministry for Primary Industries
Manatū Ahu Matua

Review of deemed value rates sea cucumber stock SCC 3 for 1 April 2014

Final Advice Paper

MPI Information Paper No: 2014/02

ISBN No: 978-0-478-42371-6 (online)
ISSN No: 2253-394X (online)

March 2014

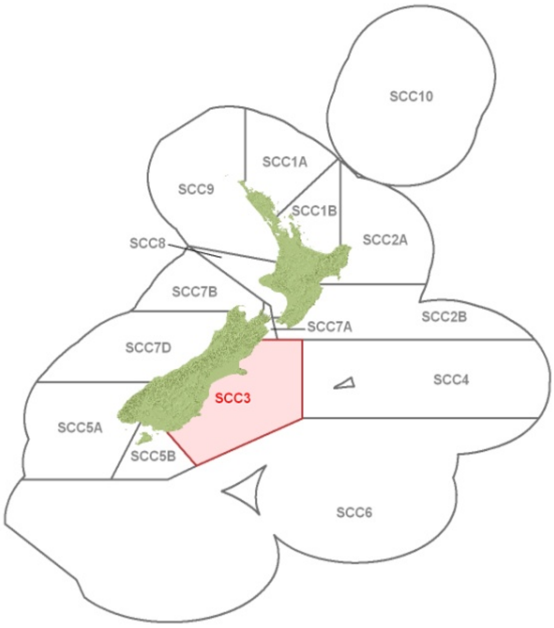
New Zealand Government

Growing and Protecting New Zealand

Contents

Page

Review of Deemed Value Rates for Sea Cucumber (SCC3) for 1 April 2014



SUMMARY

1 The Ministry for Primary Industries (MPI) recommends that you review the deemed value (DV) rates for the South-East coast sea cucumber fishery (SCC 3) effective from 1 April 2014.

2 SCC 3 is currently over caught by commercial fishers, with landings totalling greater than 400% of the Total Allowable Commercial Catch (TACC) so far in the current fishing year. This suggests that the current SCC 3 DV rates are inadequate to incentivise fishers to harvest within the current TACC.

3 Additionally, MPI is concerned that the reported commercial landings in this fishery represent only a small proportion of the actual catch, with a potentially significant amount of underreporting occurring. This underreporting is thought to be partially due to a lack of understanding surrounding quota management status of sea cucumber and reporting obligations for fish returned to the sea in accordance with Schedule 6 of the Fisheries Act 1996 (the Act). The lack of accurate catch data has reduced MPI's capacity to make other management decisions regarding this fishery.

4 MPI proposes that you adjust the deemed value rates to take into account current economic factors and to incentivise fishers to harvest SCC 3 within the current TACC.

5 MPI considers the DV review as a first step in an ongoing initiative to address ongoing over catch in the SCC 3 fishery, and increase information on SCC 3 to inform future management decisions to grow and ensure the sustainability of this high value stock.

6 The options set out in Table 1 below have been assessed in terms of the relevant statutory requirements and the best available information, and tangata whenua and stakeholder input.

Table 1: Current and proposed deemed value rates/kg for SCC 3

	Option	Interim	Annual	Differential				
	Over catch		*0 - 20%*	*>20%*	*>40%*	*>60%*	*>80%*	*>100%*
Current	1 (Status Quo)	$ 1.50	$ 2.00	$ 2.40	$ 2.80	$ 3.20	$ 3.60	$ 4.00
Proposed	2	$ 20.00	$ 40.00	$ 48.00	$ 56.00	$ 64.00	$ 72.00	$ 80.00
	3	$ 3.60	$ 4.00	$ 4.80	$ 5.60	$ 6.40	$ 7.20	$ 8.00
	4	$ 1.80	$ 2.00	$ 3.20	$ 4.40	$ 5.60	$ 6.80	$ 8.00

7 MPI's preferred approach is Option 4. This would increase the interim DV rate from $1.50 to $1.80, retain the current annual DV rate, and put in place a steeper differential rate. The deemed value payments faced by fishers under Option 4 remain similar to current rates at low levels of over-catch, however, become increasingly severe as the level of over catch increases. By adjusting only the differential rates, the unavoidable nature of SCC 3 bycatch is better taken into account. This option provides more flexibility for fishers while reducing the incentives to misreport.

RECOMENDATIONS

MPI recommends that for the SCC 3 fishery you:

Note that whatever option is chosen below MPI will engage with industry to educated fishers and licensed fish receivers of the Schedule 6 status of SCC and reporting obligations

NOTED

AND

Option 1 **YES / NO**

Agree to maintain the current Interim, Annual and Differential deemed value rates as per Option 1, Table 1.

OR

Option 2 **YES / NO**

Agree to increase the Interim, Annual and Differential deemed value rates as per Option 2, Table 1.

OR

Option 3 **YES / NO**

Agree to increase the Interim, Annual and Differential deemed value rates as per Option 3, Table 1.

OR

Option 4 **YES / NO**
(MPI preferred)

Agree to maintain current the annual deemed value rate and increase Interim and differential rates as per Option 4, Table 1.

AGREED / AGREED AS AMENDED / NOT AGREED

Hon Nathan Guy

James Stevenson-Wallace
Director Fisheries Management

Minister for Primary Industries

/ / 2014

CONTEXT

The deemed value framework

8 The DV framework is an economic tool that incentivises commercial fishers to balance their catch with Annual Catch Entitlement (ACE) while not discouraging them from landing and reporting catch they are unable to balance with ACE. The requirement for commercial fishers to balance catch with ACE is a fundamental principle of the Quota Management System (QMS), contributing to both sustainability and utilisation objectives under the Act. The intent is to protect the long term value of stocks and to support kaitiakitanga by encouraging the overall commercial catch for each QMS stock not to exceed the available ACE and/or the TACC.

9 Under the DV framework, commercial fishers are charged for every kilogram of fish landed in excess of the ACE that they hold or can obtain by the end of the fishing year[1]. In most stocks (including SCC 3), DVs follow a ramped differential deemed values schedule[2]. Under this schedule, fishers face higher deemed value rates the further they exceed their ACE holdings. In this way, the DV framework provides the flexibility for fishers to either alter their behaviour and fishing practices to reduce the catch of that stock or to pay the deemed value.

10 The level at which annual deemed values are set is directly related to economic variables such as operating costs, ACE prices, transaction costs of acquiring ACE, and landed fish prices. When any of these factors change, so do the incentives created by the deemed values. Where MPI considers the DV rate for a stock is not meeting the objectives of the DV framework, the DV rate is reviewed against driving economic factors and options considered to rebalance the incentives.

11 The setting of DV rates is critical for ensuring that the correct incentives are in place. DV rates that are set too low may lead to catches in excess of the TACC, which may have negative implications for sustainability and the long-term value of the resource. Conversely,

[1] Interim deemed value rates are charged each month to commercial fishers for every kilogram of fish landed in excess of ACE they hold. If the fisher sources enough ACE to cover his or her catch, the interim rates paid are reimbursed. If the fisher does not source enough ACE by the end of the fishing year, the difference between the interim and annual deemed value rates is charged for all catch in excess of ACE. Therefore, the annual rate applies at the end of the fishing year only.

[2] Differential deemed value rates, if applicable, are also charged at the end of the fishing year if the fisher harvested well in excess of his or her ACE holdings. The table below outlines the standard differential deemed value rate schedule (standard schedule), applicable to most stocks. Differential rates reflect the increasingly detrimental impact of higher levels of over catch on sustainability and on the long term value of the resource, providing stronger incentives to avoid over catch. For vulnerable or rebuilding stocks, a more stringent differential deemed value schedule (e.g. applying from 5% or 10% over catch) may be more appropriate than the standard schedule.

Catch in excess of ACE holdings	*0 - 20%*	>20%	>40%	>60%	>80%	>100%
Differential deemed value rate as a percentage of the annual deemed value rate	*100%*	120%	140%	160%	180%	200%

DV rates that are set too high may discourage landing and accurate reporting. These types of behaviour undermine sustainability and utilisation objectives.

12 It must be noted that the effectiveness of the DV framework is also dependent on individual fishers' compliance with landing and reporting requirements, their responses to the incentives provided, and the influence of other incentives such as those created by market conditions.

13 A common criticism of the DV framework is that some TACCs are not set correctly (e.g. too low or mismatch between target and key bycatch species) and that for some species bycatch is unavoidable, and therefore that DVs mainly create incentives to illegally discard fish. Such sustainability and utilisation concerns are identified through MPI's annual fisheries planning process in discussion with tangata whenua and stakeholders.

14 The setting of DV rates is considered a separate process from setting TACCs and the adequacy of the TACC is not a matter that the Minister should consider when setting DV rates[3]. The DV rate changes proposed in this paper are aimed at protecting the TACC, regardless of the level at which it is set, by encouraging balancing of catch with ACE while avoiding creating incentives to dump and misreport. Furthermore, the proposed changes to DV rates are intended to provide stronger incentives for fishers to report catch correctly.

Deemed Value Guidelines

15 The practical application of the DV framework is developed in the Deemed Value Guidelines (the Guidelines), which are summarised below (see Appendix 1 for full guidelines):

- deemed value rates should generally be set between the ACE price and the port price;
- deemed value rates should generally exceed the ACE price by transaction costs;
- deemed value rates should avoid creating incentives to misreport;
- deemed value rates for constraining bycatch species may be higher;
- deemed value rates should generally be set at twice the port price for high value single species fisheries and species subject to international catch limits;
- deemed value rates for Chatham Island landings may be lower;
- interim deemed value rates should generally be set at 90% of the annual deemed value rate;
- differential deemed value rates should generally be set.

3 *Pacific Trawling Limited & Independent Fisheries Limited v Minister of Fisheries, High Court, Napier Registry, 29 August 2008, CIV 2007-441-1016, Priestley J.*

STATUTORY CONSIDERATIONS

16 Section 10 says you must take into account the following information principles when exercising or performing functions, duties or powers under the Act (such as setting deemed values):

a) decisions should be based on the best available information
b) decision makers should take into account any uncertainty in the available information,
c) decision makers should be cautious when information is uncertain, unreliable, or inadequate, and
d) the absence of, or any uncertainty in, any information should not be used as a reason for postponing or failing to take any measure to achieve the purpose of the Act.

17 Section 75(1) of the Act requires you to set annual and interim DV rates for all stocks managed under the QMS. Section 75(2)(a) requires you, when setting DV rates, to take into account the need to provide an incentive for every commercial fisher to acquire or maintain sufficient ACE each fishing year that is not less than the total catch of the stock taken.

18 Section 75(2)(b) specifies the matters that you may have regard to when setting deemed value rates for a stock. These are:

- the desirability of commercial fishers landing catch for which they do not have ACE;
- the market value of ACE for the stock;
- the market value of the stock;
- the economic benefits obtained by the most efficient commercial fisher, licensed fish receiver, retailer, or any other person from the taking, processing, or sale of fish, aquatic life or seaweed;
- the extent to which catch of that stock has exceeded or is likely to exceed the TACC for the stock in any year; and
- any other matters that you consider relevant.

19 Section 75(3) specifies that the annual deemed value rate must be greater than the interim deemed value rate. Furthermore, you may choose to set, under section 75(4), differential deemed value rates for specific stocks. Section 75(5) allows you to set different deemed value rates for fish landed in the Chatham Islands, reflecting the unique marketing conditions of those landings. Section 75(6) requires that you should not have regard to personal circumstances or set separate deemed value rates in individual cases. Under section 75(7) you may vary deemed value rates to take effect at the start of the next fishing year. Before setting deemed value rates, you must consult with stakeholders and tangata whenua that have an interest in the stock, as required by section 75A.

SCC 3 FISHERY

20 Sea cumber (SCC) in SCC 3 (located off the south east coast of the South Island) is primarily taken as a bycatch in the inshore tarakihi, red cod and stargazer bottom trawl fisheries.

21 Targeted fisheries for SCC are currently being developed in other stocks and shows potential for becoming a high value, economically important fishery. Industry figures suggest SCC can fetch between $40 and $60 per kg wet and between $300 and $600 per kg dried. However, SCC fisheries need to be managed with care due to a vulnerability of SCC fisheries to overfishing and limited stock information.

22 Sea cumber fisheries worldwide have been shown to be highly susceptible to overfishing, with most sea cucumber fisheries in the Asia-Pacific region having been driven to commercial extinction. To reduce the risk to New Zealand SCC fisheries, all harvest is currently managed under nominal TACC limits. In the presence of limited stock information, this approach has so far been successful for most SCC stocks, with the exception of SCC 3.

23 The TACC limit of SCC 3 is currently set at 2000 kg, but high levels of over-catch need to be addressed. The reported landings in SCC 3 in the 2012-2013 fishing year reached 427% TACC.

24 In 2009, DVs for all SCC stocks were reviewed and new DV rates applied across the board (see table 1 for current DVs). All stocks, except SCC 3, had annual DV rates increased to $40 to reflect the high product value and incentivise fishers to balance catch with ACE.

Table 2: Current deemed value rates/kg for all SCC stocks

	Stock	Interim	Annual	Differential (standard schedule)				
	Over catch		*0 - 20%*	*>20%*	*>40%*	*>60%*	*>80%*	*>100%*
Current	SCC 1A, 1B, 2A, 2B, 4, 5A, 5B,6, 7A, 7B, 7D, 8, 9, 10	$ 20.00	$ 40.00	$ 48.00	$ 56.00	$ 64.00	$ 72.00	$ 80.00
	SCC 3	$ 1.50	$ 2.00	$ 2.40	$ 2.80	$ 3.20	$ 3.60	$ 4.00

25 A less dramatic increase in the SCC 3 DV to $2.00 per kg and ramping up to $4.00 per kg under the standard ramping schedule was put in place to match the port price at that time. SCC caught by trawl is considered lower quality than hand gathered SCC from other areas and fetches a lower price in the market. The smaller increase for SCC 3 took into account the bycatch nature of the fishery and the desire to incentivise accurate reporting.

26 Additionally, SCC is listed under Schedule 6 of the Act. This allows for the return of live SCC to the water so long as it is likely to survive, is returned as soon as practicably possible, and is recorded in the on a vessel’s landing returns.

27 SCC are relatively hardy organisms and although MPI hold no data on the survivability of caught SCC, information from fishers and reports on other sea cucumber species ability to survive severe damage suggest survivability is likely high. However, despite the ability for fishers to return bycatch of SCC back to the sea, limited Schedule 6 releases are reported in SCC 3.

NEED TO ACT

28 Deemed value rates are reviewed on an annual basis. MPI determines stocks to review deemed value rates for, after:

- assessing relevant information against the Deemed Value Guidelines and the need to provide effective incentives for fishers to balance catch with ACE; and
- inviting tangata whenua, the fishing industry and other stakeholders to nominate stocks for deemed value rate reviews, in the context of discussions as part of the fisheries planning process for fisheries management.

29 For SCC 3 MPI considers the DV rates do not provide effective incentives for fishers to balance catch with ACE. MPI is concerned given that:

- There is large over-catch in SCC 3. In the first half of the 2013/14 fishing year, 7870kg of catch was reported, representing 393% of the TAC and $21,640 in annual deemed values, with no reported Schedule 6 released.
- Different DV's between Quota Management Areas could incentivise misreporting. In this way high quality hand gathered product may enter the market at a significantly reduced price, undermining the current market value of SCC.
- SCC 3 catch is severely underreported: Observer coverage suggests current reported catch landing information for SCC 3 is unrepresentative of actual catch. 95% of all reported SCC 3 catch comes from only 4 of approximately 65 vessels fishing in the associated target fisheries (TAR, STA & RCO) and included on reports SCC discards or returns under Schedule 6 in the 2013-14 fishing year.

CONSULTATION

30 MPI consulted on your behalf on the proposed changes with tangata whenua and stakeholders during January and February 2014. Initial proposals were the same as those outlined in Table 1. MPI received 4 submissions relating to the proposed changes. Submissions were received from:

- New Life Seafood Products
- Ocean Fisheries Ltd.
- Seafood New Zealand (SNZ)
- Southern Inshore Fisheries Management Company Ltd. (SIF)

31 Full copies of the submissions are provided in Appendix 2 for your information.

32 Of the 4 submissions received, 1 was in favour of Option 2 while the remaining 3 were in favour of Option 1. No comments were received on Options 3 or 4. Submitter's comments on each rate change option are addressed in the Option analyses below.

ANALYSIS OF OPTIONS

33 MPI recommends that you make changes to the DV rate for SCC 3 from 1 April 2014. Proposed options for the new DV rate are outlined in Table 1. MPI's preferred option is Option 4.

Table 3: Current and proposed deemed value rates/kg for SCC 3

	Option	Interim	Annual	Differential				
	Over catch		*0 - 20%*	*>20%*	*>40%*	*>60%*	*>80%*	*>100%*
Current	1 (Status Quo)	$ 1.50	$ 2.00	$ 2.40	$ 2.80	$ 3.20	$ 3.60	$ 4.00
Proposed	2	$ 20.00	$ 40.00	$ 48.00	$ 56.00	$ 64.00	$ 72.00	$ 80.00
	3	$ 3.60	$ 4.00	$ 4.80	$ 5.60	$ 6.40	$ 7.20	$ 8.00
	4	$ 1.80	$ 2.00	$ 3.20	$ 4.40	$ 5.60	$ 6.80	$ 8.00

OPTION 1 - STATUS QUO

Annual DV of $2.00 ramping up to $4.00 under the standard schedule

34 Under the status quo, current over-catch would likely continue unless effort in the associated targeted fisheries changes dramatically. Due to limited stock information MPI cannot determine if current reported landed catch rates can be sustained without negatively impacting the stock. Under Option 1, fishers would see no impacts on current operations.

35 However, in light of the potential underreporting of SCC 3 catch in the bottom trawl fisheries, MPI would work with industry to improve fishers' knowledge on SCC status as a QMS species, and the need for accurate reporting of Schedule 6 releases and discards of SCC 3.

Submission comments

36 SNZ, SIF and Ocean Fisheries consider the DV rate should remain at the current level. SNZ considers the DV rates are currently set lower than the other stocks to reflect the poorer quality of trawl caught SCC and the port price of SCC at the Christchurch market. All inshore trawling representatives (SNZ, SIF and Ocean Fisheries) argue that due to these factors any increase in DV rates will incentivise fishers to misreport and thus further reduce the limited economic returns they currently obtain.

37 SNZ and SIF both note that under sections 75 (2(a)) you may have regard to additional factors including the desirability of allowing fishers to land catch for which they have no ACE to allow for both utilisation of unavoidable by catch and the stock and continue to provide catch information.

38 All inshore trawling industry representatives note the Schedule 6 status of the SCC and the ability to return fish providing it is likely to survive. They suggest that an increase in DV rates will only incentivise a further reduction to the proportion of catch that is presently landed.

MPI response

39 MPI agrees that the DV rate was maintained at a lower rate for the reasons stated by SNZ. However, due to increased market demand for SCC product, the current DV no longer reflects the port price, which has increased. Maintaining the current DV would not provide any additional incentive for catch to be managed within the TACC given the economic benefit fishers can obtain from landing against the current DV.

40 MPI acknowledge that any increase to DVs may promote misreporting. However this outcome needs to be balanced against ensuring an appropriate incentive is in place for fishers to manage catch within available ACE. MPI considers other DV options proposed would not impose such financial hardship so as to promote the need to misreport.

41 MPI also considers the ability to release SCC under Schedule 6 as an appropriate tool that fishers can use to mitigate a proportion of the unavoidable SCC 3 bycatch, so long as the associated conditions and reporting obligations are met.

OPTION 2 - ADJUST DV RATES IN LINE WITH OTHER SCC STOCKS

Annual DV of $40.00 ramping up to $80.00 under the standard schedule

42 Increasing DV rates in SCC 3 in line with other SCC stocks would rectify the current disparity in DV rates, and address any concerns around misreporting of catch area. However, this option may increase the incentives to misreport catch of SCC 3.

43 Under Option 2 fishers would face large financial impacts. At the current level of reported catch annual DV invoices would exceed $430,000. Such severe financial penalties would likely result in any unavoidable catch over the 2000 kg TACC being returned to the sea. If the Schedule 6 requirements where being complied with and reported accurately, this would not be of concern. However, given concerns around under reporting of Schedule 6 returns and discards, MPI considers that Option 2 may further decrease catch reporting. A further decrease in catch information would negatively impact MPI’s ability to assess the sustainability of the SCC 3 stock and result in a loss of utilisation opportunities.

Submission comments

44 New Life Seafood Products support an increase in the SCC 3 DV rate to match the DV rate in all other stocks (Option 2). New Life Products, a major quota holder in SCC 1A, 1B, 7A and 9, has suggested that the low DV rates and low market value of trawl caught SCC 3, is leading some traders of dried SCC product to seek out trawl caught SCC 3 in favour SCC caught in developing targeted fisheries. There is concern this low quality product is

undermining higher quality and higher value product collected in other SCC stocks where DV rates are $40 per kg.

MPI response

45 While Option 2 would bring the SCC 3 DV rate in line with all other SCC stocks, MPI considers the financial penalties would be so high as to incentivise misreporting of all SCC 3 catch that cannot be balanced against ACE. This option would increase what are already considered high rates of unreported returns to the sea, and further reduce MPI's ability to effectively manage SCC 3.

OPTION 3 – ALTER ANNUAL DV RATES TO REFLECT CURRENT MARKET RATES IN SCC 3

Annual DV of $4.00 ramping up to $8.00 under the standard schedule

46 Under this option the annual DV rate for SCC 3 would remain the same while a steeper differential rate is put in place. The interim DV rate would also be increased to $1.80 in line with principle 7 the of the Deemed Value Guidelines (appendix 1) which states that interim DV rates must generally be set at 90% of the annual DV rate.

47 Option 3, by doubling the annual DV rate, will impact fishers on even small over-catches of the SCC 3 TACC. At the current level of reported catch annual DV invoices for SCC 3 would exceed $43,000.

48 As SCC bycatch is difficult to mitigate, increased DV rates may incentivise misreporting for SCC 3 catch. Under this option MPI would work with the industry to improve the reporting of Schedule 6 releases and promote the use of Schedule 6 as a tool to reduce the amount the over catch seen in the fishery.

49 However, Schedule 6 releases do not apply to SCC catch unlikely to survive being returned to the sea. Catch judged too damaged to survive must be either landed or recorded as discarded and met with ACE or charged against DV. In this case higher DV rates may still incentivise misreporting and reduce the economic incentives to those fishers that do report and land.

Submission comments

50 No comments on Option 3 were received in submissions

MPI comments

51 MPI considers Option 3 does not fully take into account the current large over catch of the TACC, and the unavoidable bycatch nature of SCC 3. As such, the doubling of the annual DV rate, though still below the current port price, may only serve decrease landings and increase non-reported discards and returns of SCC 3.

OPTION 4 – ALTER DV DIFERENTIAL RATE TO REFLECT CURRENT MARKET RATES (*MPI preferred option*)

Annual DV of $2.00 ramping up to $8.00 under a steeper differential schedule

52 Under this option the annual DV rate for SCC 3 would remain the same while a steeper differential rate is put in place.

53 Compared to Option 3, the penalties under Option 4 remain the same or similar at low levels of over-catch, however, become increasingly severe as the level of over catch increases. By adjusting only the differential rates, the unavoidable nature of SCC 3 bycatch is better taken into account. This option provides more flexibility for fishers in their daily operations while reducing the incentives to misreport.

Submission comments

54 No comments on Option 4 were received in submissions

MPI comments

55 MPI considers that Option 4 takes into the account current large over-catch of the TACC, and the bycatch nature of SCC 3, and works to reduce the incentives to misreport landings and encourages fishers to manage catch within available ACE.

56 MPI recognises that under this option, there may still be an incentive for fishers to misreport or discard damaged catch where over-catch, and thus penalties, reaches their peak. However, as with Option 3, MPI will work with industry to improve the reporting of Schedule 6 releases and promote the use of Schedule 6 as a tool to reduce the amount of the over catch seen in the fishery.

OTHER MATTERS

57 Other issues noted in submissions fall outside the scope of this deemed value review and will not be dealt with here in detail. These views are summarised below for your information.

58 MPI acknowledges that increased DV rates may increase the amount of Schedule 6 releases and a loss of utilisation. However, MPI notes that all submitters fail to address the issue of non-reporting around the use of the Schedule 6. There were no reported Schedule 6 releases or discards of SCC 3 in the 2013/14 fishing year, which are at odds with observer reports suggesting as much as 80% of catch may be returned to the sea during a fishing trip. Any increase in releases/discards of SCC 3 could potentially be deemed insignificant against the current level of unreported releases.

59 A recurrent issue raised in trawl fishing industry submissions (SNZ, SIF and Ocean Fisheries Ltd.) is that they consider the TACC for SCC 3 is set too low and does not reflect the abundance of the stock. SNZ and Ocean Fisheries Ltd suggest that in the absence of any

sustainability concerns, a TAC review for SCC 3 be undertaken, and subsequently increased, at least to a level that covers current reported catch.

60 The setting of deemed value rates is a separate process from setting TACCs. Your decision to set a deemed value rate cannot be influenced by whether or not submitters consider the TACC for a stock to be set correctly. This is reinforced by case law which indicates that the adequateness of the TACC is not a relevant consideration when setting deemed value rates[4].

61 MPI considers that there is too little information on the SCC 3 stock to assert the presence or absence of sustainability concerns in this fishery. The limited information that is available only suggests that actual catch by trawl is likely more than the landed reported catch, due to non-reporting of discards and Schedule 6 releases. MPI considers that some of this underreporting may stem from lack of understanding around the QMS status of SCC, its listing under Schedule 6 of the Act and reporting obligations.

62 MPI is looking to improve reporting of Schedule 6 releases and discards for which to inform future abundance estimates and enable MPI to review the TACC and help prove up this potentially valuable fishery. It is only with accurate reporting of catch effort data, in line with the reporting regulations, that MPI can begin to confidently make assessment on the sustainability of the SCC 3 stock.

63 The DV review presented here is the beginning of a series of steps to improve stock information in order to realise utilisation and sustainability goals for SCC 3. Further steps include working to re-educated fishers and LFRs on their reporting obligation concerning the release of fish under Schedule 6, and supporting quota holders in establishing stock abundance estimates.

[4] *Pacific Trawling Limited & Independent Fisheries Limited v Minister of Fisheries, High Court, Napier Registry, 29 August 2008, CIV 2007-441-1016, Priestley J.*