IFFO RS
Global Standard for Responsible Supply
of Marine Ingredients

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Global Standard for Responsible Supply of Marine Ingredients
Fishery Assessment Methodology and Template Report V2.0

Fishery Under Assessment	**Pacific ocean perch (Rockfish)** **(*Sebastes alutus*)** **Central Gulf of Alaska**
Date	**January 2020**
Assessor	**Jim Daly**

Application details and summary of the assessment outcome	
Name: Kodiak Fishmeal	
Address:	
Country: Alaska	**Zip:**
Tel. No.:	**Fax. No.:**
Email address:	**Applicant Code:**
Key Contact:	**Title:**
Certification Body Details	
Name of Certification Body:	**SAI Global Ltd**

Assessor	**Peer Reviewer**	**Assessment Days**	**Initial/Surveillance/ Re-approval**	**Whole fish/ By-product**
Jim Daly	Vito Romito	0.5	SURV 1	By-product
Assessment Period	2019			

Scope Details	
Management Authority (Country/State)	Alaska Fisheries Science Centre (AFSC)
Main Species	Pacific ocean perch (Rockfish)
Stock:	Central Gulf of Alaska
Fishery Location	FAO 67 Pacific Northeast
Gear Type(s)	Demersal trawls, seines, beam and otter trawls, longlines, hook and lines.
Outcome of Assessment	

Overall Outcomes:	**Outcome**	**Clause(s) failed**
Pacific ocean perch (Rockfish)	**PASS**	**NONE**
Peer Review Evaluation	**AGREE**	
Recommendation	**APPROVE**	

Assessment Determination
If any species is categorised as Endangered or Critically Endangered on IUCN's Red List, or if it appears in the CITES appendices, it cannot be approved for use as IFFO RS raw material. Pacific ocean perch does not appear as Endangered or Critically Endangered on IUCN's Red List, nor does it appear in CITES appendices; therefore, Pacific ocean perch is eligible for approval for use as IFFO RS by-product raw material. One stock forms part of this assessment: **1) Central Gulf of Alaska FAO 67** Fishery removals of the stock is considered in the various stock assessment processes so the stock **PASSES** Clause C1.1. For Pacific ocean perch the most recent estimated spawning stock biomass (SSB) is above Blim and removals are not considered to be negligible therefore, the stock **PASSES** Clause C1.2. In order to be approved, the stock assessed must pass both Clause C1.1 and C1.2; therefore: 1)   Pacific ocean perch is **APPROVED** by SAI Global assessors in the assessment area for the production of fishmeal and fish oil under the current IFFO RS v 2.0 by-products standard.

Peer Review Comments
Pacific Ocean Perch (POP) in the Gulf Alaska (GoA) is subject to rigorous stock assessment by the National Marine Fisheries Service, Alaska office. Catch and survey data are included in the biannual stock assessment. As estimated in November 2018, the stock is considered to be well above the B_{35} target reference point. The Peer Reviewer agrees that POP in the area assessed should be approved for the production of fishmeal and fish oil under the IFFO-RS v 2.0 by-products standard.

Notes for On-site Auditor

HOW TO COMPLETE THIS ASSESSMENT REPORT
By-products

The process for completing the template for **by-product raw material** is as follows:

1. ALL ASSESSMENTS: Complete the Species Characterisation table with the names of the by-product species and stocks under assessment. The '% landings' column can be left empty; all by-products are considered as Category C and D.
2. IF THERE ARE CATEGORY C BYPRODUCTS UNDER ASSESSMENT: Complete clause C1 for **each** Category C by-product.
3. IF THERE ARE CATEGORY D BYPRODUCTS UNDER ASSESSMENT: Complete Section D.
4. ALL OTHER SECTIONS CAN BE DELETED. Clauses M1 - M3, F1 - F3, and Sections A and B do not need to be completed for a by-product assessment.

By-product approval is awarded on a species-by-species basis. Each by-product species scoring a pass under the appropriate section may be approved against the IFFO RS Standard.

SPECIES CATEGORISATION

The following table should be completed as fully as the available information permits. Any species representing more than 0.1% of the annual catch should be listed, along with an estimate of the proportion of the catch each species represents. The species should then be divided into Type 1 and Type 2 as follows:

- **Type 1 Species** can be considered the 'target' or 'main' species in the fishery. They make up the bulk of annual landings and are subjected to a detailed assessment.
- **Type 2 Species** can be considered the 'bycatch' or 'minor' species in the fishery. They make up a small proportion of the annual landings and are subjected to relatively high-level assessment.

Type 1 Species must represent 95% of the total annual catch. Type 2 Species may represent a maximum of 5% of the annual catch (see Appendix B).

Species which make up less than 0.1% of landings do not need to be listed (NOTE: ETP species are considered separately). The table should be extended if more space is needed. Discarded species should be included when known.

The 'stock' column should be used to differentiate when there are multiple biological or management stocks of one species captured by the fishery. The 'management' column should be used to indicate whether there is an adequate management regime specifically aimed at the individual species/stock. In some cases, it will be immediately clear whether there is a species-specific management regime in place (for example, if there is an annual TAC). In less clear circumstances, the rule of thumb should be that if the species meets the minimum requirements of clauses A1-A4, an adequate species-specific management regime is in place.

NOTE: If any species is categorised as Endangered or Critically Endangered on the IUCN Red List, or if it appears in the CITES appendices, it **cannot** be approved for use as an IFFO RS raw material. This applied to whole fish as well as by-products.

TYPE 1 SPECIES (Representing 95% of the catch or more)
Category A: Species-specific management regime in place.
Category B: No species-specific management regime in place.

TYPE 2 SPECIES (Representing 5% OF THE CATCH OR LESS)
Category C: Species-specific management regime in place.
Category D: No species-specific management regime in place.

Common name	Latin name	Stock	% of landings	Management	Category
Pacific Ocean Perch	*Sebastes alutus*	FAO 67 Pacific Northeast	N/A	AFSC	C

CATEGORY C SPECIES

In a whole fish assessment, Category C species are those which make up less than 5% of landings, but which are subject to a species-specific management regime. In most cases this will be because they are a commercial target in a fishery other than the one under assessment. In a by-product assessment, Category C species are those which are subject to a species-specific management regime and are usually targeted species in fisheries for human consumption.

Clause C1 should be completed for **each** Category C species. If there are no Category C species in the fishery under assessment, this section can be deleted. A Category C species does not meet the minimum requirements of clause C1 should be re-assessed as a Category D species.

Species Name	Pacific Ocean Perch (POP) *Sebastes alutus*	
C1	**Category C Stock Status - Minimum Requirements**	
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process OR are considered by scientific authorities to be negligible.	**PASS**
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	**PASS**
Clause outcome:		**See above**

C1
Evidence
This assessment covers the area outlined (**Figure 1):**

Figure 1 Gulf of Alaska Map **R1**

Rockfish are assessed on a biennial stock assessment schedule to coincide with the availability of new survey data. The current assessment used updated 2017 catches of 23,880t and new estimated

2018-2020 catches of 24,706 t, 27,000 t, and 26,041 t, respectively. Projected catches are based on realized catches from 2015-2017.

C1.2
Evidence
A statistical age-structured model is the primary assessment tool for this stock. For the 2019 fishery, NOAA recommended the maximum allowable catch (ABC) of 28,555 t from the updated projection model. This ABC is 2% less than 2018 and 0.2% less than projected 2019 ABC from the 2017 assessment. The corresponding reference values for POP/Rockfish are summarized in **Table 1** with recommended ABC values in bold:

Table 1: Projected ABCs for 2019 and 2020 derived using estimated catch for 2018, and projected catches for 2019 and 2020 based on realized catches from 2015-2017. NOAA Fisheries **R2**

Quantity	As estimated or specified *last* year for:		As estimated or recommended *this* year for:	
	2018	2019	2019	2020[1]
M (natural mortality)	0.066	0.066	0.066	0.066
Tier	3a	3a	3a	3a
Projected total (age 2+) biomass (t)	511,934	497,600	496,922	481,608
Projected Female spawning biomass	180,150	177,539	176,934	172,345
$B_{100\%}$	293,621	293,621	293,621	293,621
$B_{40\%}$	117,448	117,448	117,448	117,448
$B_{35\%}$	102,767	102,767	102,767	102,767
F_{OFL}	0.113	0.113	0.113	0.113
$maxF_{ABC}$	0.094	0.094	0.094	0.094
F_{ABC}	0.094	0.094	0.094	0.094
OFL (t)	34,762	34,010	**33,951**	32,876
maxABC (t)	29,236	28,605	**28,555**	27,652
ABC (t)	29,236	28,605	**28,555**	27,652
Status	As determined *last* year for:		As determined *this* year for:	
	2016	2017	2017	2018
Overfishing	No	n/a	No	n/a
Overfished	n/a	No	n/a	No
Approaching overfished	n/a	No	n/a	No

NOAA conclude that the stock is not overfished, and not approaching an overfished condition. POP/Rockfish catch/biomass ratio has ranged from < 0.01 to 0.05 between 1991-2018. Since 2013, the catch/biomass ratio has been increasing as a result of the fishery fully taking ABC in all the areas where trawling is allowed.

Projected Female spawning biomass for 2020 is 172,345t against $B_{35\%}$ (projected) of 102,767t.

References
R1 Gulf of Alaska Map:
https://www.bing.com/images/search?q=gulf+of+alaska+map&id=24C4A4FC43BAC7B16B000EE5DE1FB8B5B724D29C&FORM=IARRTH
R2 Assessment of Pacific ocean perch stock in the Gulf of Alaska
Peter-John F. Hulson, Dana H. Hanselman, Chris R. Lunsford, and Ben Fissel
November 2018 7pp https://archive.fisheries.noaa.gov/afsc/REFM/Docs/2018/GOA/GOApop.pdf

Standard clauses 1.