Fact Sheet

The U.S. Environmental Protection Agency (EPA)
Proposes to Reissue
a National Pollutant Discharge Elimination System (NPDES) Permit
to discharge pollutants pursuant to the provisions of
the Clean Water Act (CWA) to:

Salish Seafood
Shelton, Washington

Public Comment Start Date: April 26, 2021
Public Comment Expiration Date: May 26, 2021

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EPA Proposes To Reissue NPDES Permit

EPA proposes to reissue the NPDES permit for the facility referenced above. The draft permit proposes conditions on the discharge of pollutants from the facility to waters of the United States. In order to ensure protection of water quality and human health, the permit places limits on the types and amounts of pollutants that can be discharged from the facility.

This Fact Sheet includes:

- information on public comment, public hearing, and appeal procedures
- a listing of proposed effluent limitations and other conditions for the facility
- a map and description of the discharge location
- technical material supporting the conditions in the permit

This facility discharges to tribal waters of the Squaxin Island Tribe. The Tribe does not have Treatment as a State (TAS) so EPA is the certifying authority for the permit (see Section IX.C.). Comments regarding the intent to certify should be directed to the EPA technical contact listed above.

Public Comment

Because of the COVID-19 virus, access to the Region 10 EPA building is limited. Therefore, we request that all comments on this draft permit or a request for a public hearing be

submitted via email to Jennifer.Molloy@epa.gov. If you are unable to submit comments via email, please call 202-564-1939.

Persons wishing to comment on or request a public hearing for this draft permit action may do so by the expiration date of the public notice period. A request for a public hearing must state the nature of the issues to be raised as well as the requester's name, address, and telephone number. All comments should include name, address, phone number, a concise statement of the basis for a comment and relevant facts upon which it is based. All comments and requests for Public Hearings must be submitted to EPA as described in the Public Comments Section of the attached Public Notice.

After the Public Notice expires, EPA will consider all substantive comments related to this draft permit. EPA's Regional Director for the Water Division will make a final decision regarding permit issuance. If no substantive comments are received, the tentative conditions in the draft permit will become final, and the permit may become effective upon issuance. If substantive comments are received, EPA will address the comments and issue the permit along with a response to comments. The permit will become effective no less than 30 days after the issuance date, unless an appeal is submitted to the Environmental Appeals Board within 30 days pursuant to 40 CFR § 124.19.

Documents are Available for Review.

The draft permit, this Fact Sheet and the Public Notice can also be found by visiting the Region 10 website at https://www.epa.gov/npdes-permits/Washington-npdes-permits. Because of the COVID-19 virus and limited building access, we cannot make hard copies available.

The draft Administrative Record for this action contains any documents listed in the References section. The Administrative Record or documents from it are available electronically upon request by contacting Jennifer Molloy.

For technical questions regarding the Fact Sheet, contact Jennifer Molloy at 202-564-1939 or Jennifer.Molloy@epa.gov. Services can be made available to persons with disabilities by contacting Audrey Washington at (206) 553-0523.

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I. Acronyms

AML	Average Monthly Limit
BAT	Best Available Technology economically achievable
BCT	Best Conventional pollutant control Technology
BE	Biological Evaluation
BO or BiOp	Biological Opinion
BOD_5	Biochemical oxygen demand, five-day
BMP	Best Management Practices
BPT	Best Practicable Control Technology
°C	Degrees Celsius
CFR	Code of Federal Regulations
CWA	Clean Water Act
DMR	Discharge Monitoring Report
DO	Dissolved oxygen
EFH	Essential Fish Habitat
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
gpd	Gallons per day
ICIS	Integrated Compliance Information System
LA	Load Allocation
lbs/day	Pounds per day
mg/L	Milligrams per liter
mL	Milliliters
ML	Minimum Level
µg/L	Micrograms per liter
mgd	Million gallons per day
MDL	Maximum Daily Limit or Method Detection Limit
MPN	Most Probable Number
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
QAP	Quality assurance plan
RP	Reasonable Potential
RPM	Reasonable Potential Multiplier
RWC	Receiving Water Concentration
SPCC	Spill Prevention and Control and Countermeasure
SS	Suspended Solids
s.u.	Standard Units
TMDL	Total Maximum Daily Load

TOC	Total Organic Carbon
TRC	Total Residual Chlorine
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001)
TSS	Total suspended solids
TU_a	Toxic Units, Acute
TU_c	Toxic Units, Chronic
USFWS	U.S. Fish and Wildlife Service
WD	Water Division
WET	Whole Effluent Toxicity
WLA	Wasteload allocation
WQBEL	Water quality-based effluent limit
WQS	Water Quality Standards

II. Background Information

A. General Information

This fact sheet provides information on the draft NPDES permit for the following entity:

Table 1. General Facility Information

NPDES Permit #:	WA0037320
Applicant:	Salish Seafoods
Type of Ownership	Tribal
Physical Address:	92 E. Chapman Road Shelton, WA 98584
Mailing Address:	Same as above
Facility Contact:	Rod Schuffenhauer, Operations Manager rschuffenhauer@salishseafoods.com (360) 426-4933
Operator Name:	N/A
Facility Location:	47.21835° N 122.90592° W
Receiving Water	Peale Passage
Facility Outfalls	001 47.21735° N 122.90707° W 002 47.21749° N 122.90721° W 003 47.21781° N 122.90719° W

B. Permit History

On July 29, 1974, the U.S. Environmental Protection Agency (EPA) issued a National Pollutant Discharge Elimination System (NPDES) permit, WA0037320, to the Squaxin Island Tribe for its Island Enterprises dba Salish Seafoods facility located in Shelton, Washington. The permit expired on July 1, 1979.

The facility submitted a permit application to EPA on April 16, 1987 and updated application materials on February 19, 2014 and May 28, 2014.

C. Tribal Coordination and Consultation

As part of Tribal Coordination, EPA shared the preliminary draft permit and draft fact sheet with the Squaxin Island Tribe prior to public notice for their review. EPA considered their comments in formulating the draft permit for public notice.

At the start of the comment period, EPA sent a letter to the Squaxin Island Tribe offering the opportunity for them to request Tribal Consultation on the draft permit.

III. Facility Information

A. Plant Description

Salish Seafoods is a shellfish processing facility located on Hartstene Island, Washington along Peale Passage.

The main activities conducted at this facility are as follows:

- The processing and packaging of harvested shellfish (oysters and manila clams) in preparation for sale and distribution, and
- The establishment of new oyster larvae in preparation for transfer to nearby oyster beds.

The processing of harvested shellfish at this facility occurs throughout the year. Operations generally occur Monday through Thursday during the winter months and Monday through Friday during the summer months. Annual production at this facility consists of approximately 380,000 pounds of manila clams, 7,500 gallons of shucked oysters, and 85,000 dozen single oysters.

Wastewater discharges from this facility are generated from three major areas; the shellfish processing building, the two oyster larvae tanks, and the trommel. Wastewater from each of these areas discharges to Peale Passage.

The processing building is the area where the bulk of the processing of the final product is conducted. This building is where the oyster and clam processing occurs including the cleaning of the shellfish as they arrive. This is also where the oysters are shucked and where the various products are packaged and prepared for shipment.

The trommel is also a source of wastewater discharge. The trommel is a mechanical device that incorporates the use of a water spray to clean used oyster shells. The cleaned oyster shells from this process are used in the larvae tanks.

Two oyster larvae tanks are located adjacent to and just north of the processing building. These larvae tanks are used to start the oyster growing process. In these tanks oyster larvae are provided with the environmental conditions necessary to adhere to oyster shells. The oyster larvae and shells are transported offsite to the oyster growing beds.

An outdoor storage area for equipment and materials contributes stormwater discharges to Peale Passage.

B. Outfall Description

The wastewater associated with the processing building consists of wash water during the processing of the shellfish. It also includes wash water associated with the cleaning of the processing area once processing has concluded. The wastewater from this building includes soap and bleach. Cleaning the processing area uses a solution of soap followed by a solution of bleach. The soap solution consists of one cap of soap for every five gallons of water. The bleach solution consists of $^{1}/_{8}$ cup bleach for five gallons of water. Approximately 15 gallons of soap solution and 15 gallons of bleach solution are used every time the building is cleaned. The building is cleaned each day of operation. Discharge from this building flows through a PVC outfall pipe emanating from the processing building onto the beach before entering Peale Passage.

Seawater is used in the trommel. The wastewater resulting from this cleaning process is routed to Peale Passage through a PVC outfall pipe.

The larvae tank is filled with sea water and brought to a temperature of 76 degrees Fahrenheit (°F). Oyster shells and larvae are then immersed in the larvae tanks. It

takes 3 days for the larvae to adhere to the oyster shells. After the third day, discharge from the larvae tanks occurs. This happens approximately 20 times per year during a four month period beginning approximately the end of March. During each discharge event approximately 9,000 to 12,000 gallons of wastewater is discharged to Peale Passage. Potential source of pollutants in the larvae tank water are the feed solutions provided to the larvae and temperature.

Heavy equipment and supplies are stored outside where they could be a source of pollutants from stormwater discharges due to exposure to precipitation.

C. Effluent Characterization

To characterize the effluent from the processing facility, EPA evaluated the facility's 2014 application form. The effluent quality is summarized in Table 2.

Table 2 Effluent Characterization

Parameter*	Minimum	Maximum
Biochemical Oxygen Demand (BOD_5)	388	392
Chemical Oxygen Demand (COD)	767	769
Total Organic Carbon (TOC)	144	148
Total Suspended Solids (TSS)	348	350
Ammonia (as N)	6.62	6.78
pH	7.25	7.29
* All units are mg/L except for pH which is in Standard Units (s.u.)		
Source: Data is from one sample and one duplicate taken on August 14, 2014.		

D. Compliance History

Compliance information for this facility, including compliance with other environmental statutes, is available on Enforcement and Compliance History Online (ECHO). The ECHO web address for this facility is: https://echo.epa.gov/detailed-facility-report?fid=110006684383

EPA inspected the facility in 2013 and 2019. It encompassed the processing facility, records review, operation and maintenance, and the collection system. The 2013 inspection resulted in a need for the permittee to submit updated permit application materials which were submitted in 2014.

IV. Receiving Water

In drafting permit conditions, EPA must analyze the effect of the facility's discharge on the receiving water.

A. Designated Uses

This facility discharges to Peale Passage near the City of Shelton, Washington. The outfalls are located on Hartstene Island and discharge to tribal waters.

Since the Squaxin Island Tribe does not have water quality standards (WQS) in place, EPA will use the Washington WQS to ensure compliance with the applicable water quality requirement of all affected States (40 CFR 122.4(d)). The applicable

WQS are found in the Washington Administrative Code (WAC) 173-201A-612 (Table 612) for the area of South Puget Sound west of longitude 122°52'30"W (Brisco Point – 122.875° W) and longitude 122°51'W (northern tip of Hartstene Island, 122.85° W). The eastern most outfall is found west of this line at 122.90707° W. The designated uses include:

Aquatic Life:	Excellent
Recreational	Primary Contact
Harvest	All
Miscellaneous	All

Excellent quality

Water quality of this use class shall meet or exceed the requirements for all uses including, but not limited to, salmonid migration and rearing; other fish migration, rearing, and spawning; clam, oyster, and mussel rearing and spawning; crustaceans and other shellfish (crabs, shrimp, crayfish, scallops, etc.) rearing and spawning.

The general narrative criteria (WAC 173-201A-260 (2)(a) and (b)) for toxic, radioactive, and deleterious materials; and aesthetic values are meant to protect this designated use. In addition to these narrative criteria, there are numeric criteria for temperature, dissolved oxygen (DO), turbidity and pH.

Primary Contact Recreation

The general narrative criteria for toxic, radioactive, and deleterious materials; and aesthetic values are meant to protect this designated use. In addition to these narrative criteria, there are numeric criteria for bacteria (enterococci and fecal coliform).

Harvesting

The general narrative criteria for toxic, radioactive, and deleterious materials; and aesthetic values are meant to protect this designated use. In addition to these narrative criteria, there are numeric criteria for bacteria (fecal coliform).

Miscellaneous

All marine waters listed in Table 612 of the Washington Water Quality Standards (see discussion below) are protected for the miscellaneous uses of aesthetics, boating, commerce/navigation, and wildlife habitat. The general narrative criteria for toxic, radioactive, and deleterious materials; and aesthetic values are meant to protect this designated use.

B. Water Quality Standards (WQS)

1. Overview

   CWA § 301(b)(1)(C) requires the development of limitations in permits necessary to meet water quality standards. 40 CFR 122.4(d) requires that the conditions in NPDES permits ensure compliance with the WQS of all affected States. A State's WQS are composed of use classifications, numeric and/or narrative water quality criteria and an anti-degradation policy. The use classification system designates the beneficial uses that each water body is expected to achieve, such as drinking water supply, contact recreation, and aquatic life. The

numeric and narrative water quality criteria are the criteria deemed necessary to support the beneficial use classification of each water body. The anti-degradation policy represents a three-tiered approach to maintain and protect various levels of water quality and uses.

The Squaxin Island Tribe has not applied for the status of Treatment as a State (TAS) from EPA for CWA purposes. When the Tribe is granted TAS, and when it has WQS approved by EPA, those tribal WQS will be used for determining effluent limitations in NPDES permits. In the meantime, the Washington WQS were used as reference for setting permit limits, and to protect uses in the State of Washington outside the tribal boundary.

Criteria for marine waters are defined in chapter 173-201A WAC (in use for CWA purposes as of 3/5/2020). Criteria considered for this discharge are summarized below:

Fecal Coliform	14 colonies/100 mL geometric mean, and not have more than 10 percent of all samples exceeding 43 colonies/100 mL
Enterococci	Must not exceed a geometric mean value of 30 CFU or MPN per 100 mL, with not more than 10 percent of all samples (or any single sample when less than ten sample values exist) exceeding 110 CFU or MPN per 100 mL
Dissolved Oxygen	6 mg/L lowest 1-day minimum
Temperature	16 degrees Celsius maximum or incremental increases above background
pH	7.0 to 8.5 standard units
Turbidity	Less than 5 Nephelometric Turbidity Units (NTU) over background if the natural condition of the receiving water is less than or equal to 50 NTUs or no more than a 10% increase if the natural condition is greater than 50 NTUs
Toxics	Toxic, radioactive, or deleterious material concentrations must be below those which have the potential, either singularly or cumulatively, to adversely affect characteristic water uses, cause acute or chronic conditions to the most sensitive biota dependent upon those waters, or adversely affect public health (No toxics in toxic amounts).
Aesthetics	Aesthetic values must not be impaired by the presence of materials or their effects, excluding those of natural origin, which offend the senses of sight, smell, touch, or taste.

C. Water Quality

Water quality data for fecal coliform is available for Peale Passage. This data for the most recent year (2019) is summarized in Appendix B.

V. Effluent Limitations and Monitoring Outfalls 001, 002 and 003

Table 3, below, presents the proposed effluent limitations and monitoring requirements in the draft permit for Outfall 001. Table 4 addresses those for Outfall 002 and Table 5 for Outfall 003.

Table 3. Draft Permit – Proposed Effluent Limitations and Monitoring Requirements – Outfall 001 – Processing Facility

Parameter	Units	Average Monthly	Maximum Daily	Sample Type	Sample Frequency
Effluent Flow	Gallons/day	REPORT	REPORT	Recorder	Daily
Total Suspended Solids	Lbs/day [1]	49.7	160.5	Grab	Weekly
Oil & Grease	Lbs/day [1]	0.7	1.7	Grab	Weekly
pH	su	Within the range of 7.0 to 8.5		Grab	Weekly
Dissolved Oxygen (DO)	mg/L	REPORT	REPORT	Grab	Monthly
Fecal Coliform	colonies/100 mL	REPORT [2]	REPORT	Grab	Weekly
Enterococci	colonies/100 mL	REPORT [2]	REPORT	Grab	Weekly
Total Residual Chlorine (TRC)	ug/L	REPORT	REPORT	Grab	Monthly [3]

1 – lbs/day must be calculated by multiplying the analysis results in mg/L by 0.00000833 then by the effluent flow for the day the sample was taken. The average monthly will be the average of all samples calculated in this manner and the maximum daily will be the largest of these individual values.
2 – the average monthly value for bacteria must be calculated as a geometric mean of the samples taken during the month.
3 – sampling for TRC must occur during a discharge from a cleaning event.

Table 4. Draft Permit – Proposed Effluent Limitations and Monitoring Requirements – Outfall 002 - Trommel

Parameter	Units	Average Monthly	Maximum Daily	Sample Type	Sample Frequency
Effluent Flow	Gallons/day	REPORT	REPORT	Recorder	Daily
Total Suspended Solids	mg/L	REPORT	REPORT	Grab	Weekly
pH	su	Within the range of 7.0 to 8.5		Grab	Weekly
Fecal Coliform	colonies/100 mL	REPORT [1]	REPORT	Grab	Weekly
Enterococci	colonies/100 mL	REPORT [1]	REPORT	Grab	Weekly
Turbidity [2]	NTU	REPORT	REPORT	Grab	Monthly

1 – the average monthly value for bacteria must be calculated as a geometric mean of the samples taken during the month.
2 – the Permittee must also report the results for turbidity from the surface water sampling on the DMR.

Table 5. Draft Permit – Proposed Effluent Limitations and Monitoring Requirements – Outfall 003 – Larvae Tanks

Parameter	Units	Average Monthly	Maximum Daily	Sample Type	Sample Frequency
Effluent Flow	Gallons/day	REPORT	REPORT	Recorder	Daily
Total Suspended Solids	mg/L	REPORT	REPORT	Grab	2/month
DO	mg/L	REPORT	REPORT	Grab	2/month
pH	su	Within the range of 7.0 to 8.5		Grab	2/month
Fecal Coliform	colonies/100 mL	---	REPORT	2/month	2/month
Enterococci	colonies/100 mL	---	REPORT	2/month	2/month
Temperature	°C	REPORT	REPORT	Grab	Daily [1]
Turbidity [2]	NTU	REPORT	REPORT	Grab	Monthly

1 – when discharging
2 - the Permittee must also report the results for turbidity from the surface water sampling on the DMR. The same natural condition station can be used as for Outfall 002.

Conditions required to address stormwater discharges from the equipment/materials storage area can be found in the Best Management Practices (BMP) Plan, which is required to contain stormwater pollution prevention conditions, described below and in Permit Part II.B.

Visual monitoring of Peale Passage in the vicinity of the discharges will be required to determine that there is no floating, suspended, or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or that may impair designated beneficial uses.

A. Basis for Effluent Limits

In general, the CWA requires that the effluent limitations for a particular pollutant be the more stringent of either technology-based effluent limits (TBELs) or water quality-based effluent limitations (WQBELs). TBELs are set according to the level of treatment that is achievable using available technology. WQBELs are designed to ensure that the WQS applicable to a waterbody are met and may be more stringent than TBELs.

B. Pollutants of Concern

Pollutants of concern are those that either have applicable TBELs or may need WQBELs. EPA identifies pollutants of concern for the discharge based on those which:

- Have a TBEL
- Have an assigned wasteload allocation (WLA) from a TMDL
- Had an effluent limitation in the previous permit
- Are present in the effluent monitoring. Monitoring data are reported in the application and DMR and any special studies
- Are expected to be in the discharge based on the nature of the discharge

Since no copy of the previous permit has been found, EPA considered Effluent Limitation Guidelines (ELGs) at 40 CFR Part 408 - Canned and Preserved Seafood Processing Point Source Category - to determine the pollutants of concern in this

type of operation. Subpart W applies to Hand-Shucked Clam Processing and Subpart Y applies to Pacific Coast Hand-Shucked Oyster Processing.

Based on the ELG analysis, pollutants of concern include the following:

- Total Suspended Solids (TSS)
- pH
- Oil and Grease

In reviewing the description of the facility from past inspection reports, the 2014 application and other permits for similar facilities, EPA is also considering the following to be pollutants of concern:

- 5 day Biochemical Oxygen Demand (BOD_5)
- Dissolved Oxygen (DO)
- Bacteria (Fecal and Enterococci)
- Total Residual Chlorine (TRC)
- Temperature

C. Technology-based Effluent Limitations (TBELs)

40 CFR Part 408 Subpart W: The provisions of this subpart are applicable to discharges resulting from existing hand-shucked clam processing facilities which process more than 1816 kg (4000 lbs) of raw material per day on any day during a calendar year.

40 CFR Part 408 Subpart Y: The provisions of this subpart are applicable to discharges resulting from existing Pacific Coast hand-shucked oyster processing facilities which process more than 454 kg (1000 lbs) of product per day on any day during a calendar year.

The level of production at Salish Seafoods is shown in Table 6:

Table 6: Production Levels

Product	**Maximum Daily Production**
Hand-shucked clams	3000 pound per day
Hand-shucked oysters	40 gallons per day (8.5 pounds/gallon) 340 pounds per day

The levels of production do not reach the levels covered by the ELG so those requirements are not directly applicable to Salish Seafoods. They can, however, be applied as Best Professional Judgement (BPJ) as the most appropriate level of technology-based control for this type of facility (40 CFR 125.3). EPA has confirmed the maximum production rates with the facility and is proposing the TBELs in Table 7 to be considered in developing effluent limitations for the draft permit.

Table 7: TBEL Development

Product	ELG Requirement		TBEL	
	Average	Maximum	Average	Maximum
Hand-shucked clams (3000 pounds/day)				
TSS*	18	59	54	177
Oil and Grease*	0.23	0.6	0.69	1.8

pH range**	6.0 – 9.0		6.0 – 9.0	
Hand-shucked oysters (340 pounds/day)				
TSS*	36	45	12.2	15.3
Oil and Grease*	1.7	2.2	0.58	0.75
pH range**	6.0 – 9.0		6.0 – 9.0	
* ELG values for TSS and Oil and Grease are in lbs/1000 lbs of product ** pH is measured in su				

Since two types of shellfish are processed in the facility, EPA calculated the pounds per day requirements based on a ratio of production shown in Table 6. The calculations are shown below:

TSS:

Average Monthly: [(54*3000) + (12.2*340)]/3340 = 49.7 pounds/day
Maximum Daily: [(177*3000) + (15.3*340)]/3340 = 160.5 pounds/day

Oil & Grease:

Average Monthly: [(0.69*3000) + (0.58*340)]/3340 = 0.7 pounds/day
Maximum Daily: [(1.8*3000) + (0.75*340)]/3340 = 1.7 pounds/day

Compliance with this type of limitation will require that effluent flow for the day the samples are taken is determined. The lab analysis for these parameters are generally measured in mg/L. To determine pounds per day, the mg/L value is multiplied by 0.00000833 then multiplied by the effluent flow in gallons per day.

The more stringent limitations between TBELs and WQBELs are included in the draft permit as proposed effluent limitations (see Table 4).

D. Water Quality-Based Effluent Limitations (WQBELs)

1. Statutory and Regulatory Basis

   CWA § 301(b)(1)(C) requires the development of limitations in permits necessary to meet WQS. 40 CFR 122.44(d)(1) implementing CWA § 301(b)(1)(C) requires that permits include limitations for all pollutants or parameters which are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State or Tribal WQS, including narrative criteria for water quality.

   The regulations require the permitting authority to make this evaluation using procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant in the effluent, species sensitivity, and where appropriate, dilution in the receiving water. The limits must be stringent enough to ensure that water quality standards are met and must be consistent with any available wasteload allocation for the discharge in an approved TMDL. If there are no approved TMDLs that specify wasteload allocations for this discharge; all of the WQBELs are calculated directly from the applicable WQS.

2. Reasonable Potential and WQBELs

   <u>pH</u>

   The Washington WQS at WAC 173-201A require pH values to be within the range of 7.0 – 8.5 su. Mixing zones are generally not granted for pH, therefore

the most stringent water quality criterion must be met before the effluent is discharged to the receiving water. EPA is proposing a WQBEL for pH in the draft permit because the WQBEL is more stringent than the TBEL.

Residues

The WQS require that surface waters be free from floating, suspended or submerged matter of any kind in concentrations impairing designated beneficial uses. The draft permit proposes a narrative prohibition with visual monitoring for this condition to implement the general criteria for aesthetics.

Since the discharges travel across the beach before reaching Peale Passage, except at high tide, no mixing zone is being proposed

There is insufficient data available to perform a reasonable potential analysis for other water quality-based parameters. Because a reasonable potential analysis cannot be conducted, there are no other WQBELs proposed in the draft permit. Accordingly, EPA is proposing that the permittee perform effluent monitoring and ambient monitoring in Peale Passage so that a reasonable potential analysis can be completed in the next permit cycle.

Monitoring for the following parameters is proposed:

Dissolved Oxygen (DO) and BOD_5

Natural decomposition of organic material in wastewater effluent impacts DO in the receiving water at distances far outside of the regulated mixing zone. The BOD_5 of an effluent sample indicates the amount of biodegradable material in the wastewater and estimates the magnitude of oxygen consumption the wastewater will generate in the receiving water.

The WQS for DO is the lowest 1-day minimum of 6 mg/L.

Bacteria

Data from other seafood processors indicate a potential for discharging fecal coliform bacteria to surface waters, even though fecal coliform are not considered characteristic in the effluent for this industry. Studies have shown that the probable primary sources of fecal coliform bacteria could be from non-point sources, including domesticated animals, harbor seals, and birds and other wildlife in and near the waterbody. There are potential problems with requiring this industry to disinfect their minor discharge because of chlorine toxicity issues, toxic chemical storage issues, and other risk factors.

The WQS state that waters designated for recreation or shellfish harvesting not contain fecal coliform bacteria in concentrations exceeding a geometric mean (of at least 3 samples) of 14 organisms per 100 ml. The WQS also state that no more than 10% of the samples may exceed a value of 43 organisms per 100 ml.

The WQS state that waters designated for recreation must not contain enterococci bacteria in concentrations exceeding a geometric mean (of at least 3 samples) of 30 organisms per 100 ml. The WQS also state that no more than 10% of the samples may exceed a value of 110 organisms per 100 ml.

The goal of a WQBEL is to ensure a low probability that the WQS will be exceeded in the receiving water as a result of a discharge, while considering the variability of the pollutant in the effluent. Because a single sample value exceeding the maximum number of organisms per 100 ml (for either bacteria) indicates a likely exceedance of the geometric mean criterion, EPA has imposed an instantaneous (single grab sample) maximum effluent limitation directly implementing the WQS for both bacteria criteria. This will ensure that the discharge will have a low probability of exceeding WQS for either fecal coliform or enterococci.

Chlorine

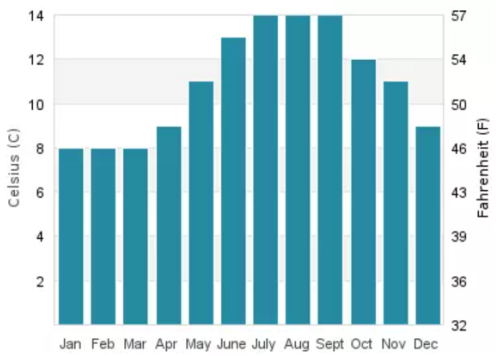
Chlorine is often used to disinfect seafood processing facilities. According to an inspection report, the bleach solution used by the permittee consists of $^{1}/_{8}$ cup bleach for five gallons of water. Approximately 15 gallons of soap solution and 15 gallons of bleach solution are used every time the building is cleaned. The building is cleaned each day of operation.

The WQS establish an acute criterion of 13.0 µg /L, and a chronic criterion of 7.5 µg/L for the protection of aquatic life. Effluent samples taken for the 2014 application did not include an analysis for TRC. The draft permit proposes monitoring for TRC during the permit cycle to gather the data necessary to evaluate the need for an effluent limitation in the next permit.

Temperature

The WQS require that waters designated for aquatic life use do not exceed a 1 day maximum temperature of 16° C (60.8° F). Temperature information was not provided in the 2014 application but in the description of the facility processes, the application states that the water in the larvae tanks is heated beyond this criterion so there appears to be the potential for this discharge to exceed the criterion. However, temperature could be ameliorated after the discharge leaves the tanks and before it reaches Peale Passage. The draft permit proposes temperature monitoring for all outfalls (more frequent for Outfall 003) in order to gather the data necessary to evaluate the need for an effluent limitation in the next permit.

The reapplication form requests information for summer and winter temperatures of the effluent. Based upon the graph, below, which shows average temperatures in Puget Sound, EPA is designating May through November as summer months and December through April as winter months.



Graph from https://seatemperature.info/puget-sound-water-temperature.html (accessed October 20, 2020)

Turbidity

Turbidity is the clarity of water expressed as nephelometric turbidity units (NTU) and measured with a calibrated turbidimeter. The WQS require that waters designated for aquatic life use do not exceed a turbidity value of 5 NTUs over background if the background turbidity is 50 NTUs or less and no more than a 10% increase if the background turbidity is greater than 50 NTUs. Turbidity was not required in the 2014 application therefore an RPA could not be performed. The draft permit proposes turbidity monitoring for all outfalls in order to gather the data necessary to evaluate the need for an effluent limitation in the next permit. Since turbidity is an "over background" criterion, a receiving water sample will be taken in conjunction with the effluent samples thus requiring at least one surface water monitoring station.

E. Antibacksliding

CWA § 402(o) and 40 CFR §122.44 (l) generally prohibit the renewal, reissuance or modification of an existing NPDES permit that contains effluent limits, permit conditions or standards that are less stringent than those established in the previous permit (i.e., anti-backsliding) but provides limited exceptions.

An anti-backsliding analysis could not be done for any parameter because the contents of the last permit are unknown.

VI. Monitoring Requirements

A. Basis for Effluent and Surface Water Monitoring

CWA § 308 and federal regulation 40 CFR 122.44(i) require monitoring in permits to determine compliance with effluent limitations. Monitoring may also be required to gather effluent and surface water data to determine if additional effluent limitations are required and/or to monitor effluent impacts on receiving water quality.

The permit also requires the permittee to perform annual effluent monitoring required by NPDES Form 2C Section V. Part A for each outfall (see Permit Part I.B.1.). This data will then be available when the permittee applies for a renewal of its NPDES permit (see Permit Part V.B.).

The permittee is responsible for conducting the monitoring and for reporting results on DMRs or on the application for renewal, as appropriate, to EPA.

B. Effluent Monitoring

Monitoring frequencies are based on the nature and effect of the pollutant, as well as a determination of the minimum sampling necessary to adequately monitor the facility's performance. Permittees have the option of taking more frequent samples than are required under the permit. These samples must be used for averaging if they are conducted using EPA-approved test methods (generally found in 40 CFR 136) or as specified in the permit.

C. Surface Water Monitoring

In general, surface water monitoring may be required for pollutants of concern to assess the assimilative capacity of the receiving water for the pollutant. In addition, surface water monitoring may be required for pollutants upon which the water quality criteria are dependent and to collect data for TMDL development if the facility discharges to an impaired water body. The draft permit proposes that a surface water station be established in an area uninfluenced by the discharge in order to determine the natural condition of the waterbody. Table 8 presents the proposed surface water monitoring requirements for the draft permit. Surface water monitoring results must be submitted with the DMR for December of each year.

Table 8. Surface Water Monitoring in Draft Permit

Parameter	Units	Sample Type	Frequency
Temperature, summer [1]	°C	Grab	Annually
Temperature, winter [2]	°C	Grab	Annually
DO	mg/L	Grab	2/year [3]
Fecal Coliform	#/100 mL	Grab	2/year [3]
Enterococci	#/100 mL	Grab	2/year [3]
Turbidity	NTU [4]	Grab	2/year [3]

1 – Summer is designated as the months May through November.
2 – Winter is designate as the months December through April.
3 – 2/year will coincide with the seasonal temperature sampling.
4 – NTU is Nephelometric Turbidity Units.

D. Electronic Submission of Discharge Monitoring Reports

The draft permit requires that the permittee submit DMR data electronically using NetDMR. NetDMR is a national web-based tool that allows DMR data to be submitted electronically via a secure Internet application.

EPA currently conducts free training on the use of NetDMR. Further information about NetDMR, including upcoming trainings and contacts, is provided on the following website: https://netdmr.epa.gov. The permittee may use NetDMR after requesting and receiving permission from EPA Region 10.

VII. Stormwater Requirements

The draft permit proposes that Stormwater Pollution Prevention (SWPP) components be included in the BMP Plan to document the control measures and practices used to minimize the impact of stormwater discharges at the facility on the water quality of Peale Passage. The BMP will also include inspection, reporting and corrective action requirements.

A. Control Measures

1. Selection, design, install, and implement
2. Minimize exposure of the equipment/material storage area to stormwater

B. Control Practices

The Control Practices taken to minimize stormwater impacts must address:

1. Training
2. Maintenance
3. Good Housekeeping
4. Minimize the potential for spills and leaks

C. Other Requirements

1. Inspections
2. Reporting and Recertification
3. Corrective Actions

Permit Part II.B. contains the requirements that must be addressed by the BMP Plan.

VIII. Other Permit Conditions

A. Quality Assurance Plan (QAP)

The permittee is required to prepare and implement a QAP within 180 days of the effective date of the final permit. The QAP must include standard operating procedures the permittee must follow for collecting, handling, storing and shipping samples, laboratory analysis, and data reporting. The plan must be retained on site and made available to EPA upon request.

B. Environmental Justice

As part of the permit development process, EPA Region 10 conducted a screening analysis to determine whether this permit action could affect overburdened communities. “Overburdened” communities can include minority, low-income, tribal, and indigenous populations or communities that potentially experience disproportionate environmental harms and risks. EPA used a nationally consistent geospatial tool that contains demographic and environmental data for the United States at the Census block group level. This tool is used to identify permits for which enhanced outreach may be warranted.

The EJ Screen score is the result of the maximum percentile of 11 primary EJ indices which comprise EJSCREEN. If the score is in the 80th percentile or higher nationally that census block group area is flagged as an EJSCREEN area and is a candidate for further EJ enhanced review.

Salish Seafoods is not located within or near a Census block group that is potentially overburdened (score of 74th percentile). The draft permit does not include any additional conditions to address environmental justice.

Regardless of whether a facility is located near a potentially overburdened community, EPA encourages permittees to review (and to consider adopting, where appropriate) Promising Practices for Permit Applicants Seeking EPA-Issued Permits: Ways To Engage Neighboring Communities (see https://www.federalregister.gov/d/2013-10945). Examples of promising practices include: thinking ahead about community's characteristics and the effects of the permit on the community, engaging the right community leaders, providing progress or status reports, inviting members of the community for tours of the facility, providing informational materials translated into different languages, setting up a hotline for community members to voice concerns or request information, follow up, etc.

For more information, please visit https://www.epa.gov/environmentaljustice and Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*.

C. Standard Permit Provisions

Permit Parts III., IV. and V. contain standard regulatory language that must be included in all NPDES permits. The standard regulatory language covers requirements such as monitoring, recording, and reporting requirements, compliance responsibilities, and other general requirements.

IX. Other Legal Requirements

A. Endangered Species Act (ESA)

EPA has prepared a Biological Evaluation (BE) to share with the US Fish and Wildlife Service and the National Marine Fisheries Service (the Services) to address the following threatened or endangered species in the area of the discharges:

Bocaccio (large Pacific coast rockfish)
Chinook salmon
Killer Whale (Orca)
Bull Trout
Marbled Murrelet

ESA requires federal agencies to consult with the Services if their actions could beneficially or adversely affect any threatened or endangered species.

B. Essential Fish Habitat

Essential fish habitat (EFH) is the waters and substrate (sediments, etc.) necessary for fish to spawn, breed, feed, or grow to maturity. The Magnuson-Stevens Fishery Conservation and Management Act (January 21, 1999) requires EPA to consult with NOAA Fisheries when a proposed discharge has the potential to adversely affect EFH (i.e., reduce quality and/or quantity of EFH).

The EFH regulations define an adverse effect as any impact which reduces quality and/or quantity of EFH and may include direct (e.g. contamination or physical disruption), indirect (e.g. loss of prey, reduction in species' fecundity), site specific, or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

EFH will be addressed in the BE being prepared for ESA (see above).

C. CWA § 401 Certification

CWA § 401 requires the State in which the discharge originates to certify that the discharge complies with the appropriate sections of the CWA, as well as any appropriate requirements of State Law. See 33 USC § 1341(d). This includes water quality standards that have been approved for Tribes with Treatment as a State (TAS). Since this facility discharges to tribal waters and the Squaxin Island Tribe has not been approved for TAS for CWA purposes, EPA is the certifying authority. EPA is taking comment on the intent to certify this permit.

Whenever a discharge may affect the quality of the waters of any other State EPA is required to notify that State. The waters of Peale Passage withing the Squaxin Island Reservation are in close proximity to the state of Washington. EPA is seeking input from the Washington Department of Ecology and is sending the draft permit package to initiate the 60-day timeframe outlined in CWA § 401(a)(2).

D. Antidegradation

EPA has completed an antidegradation analysis based on Washington State's Antidegradation Policy which requires that discharges into a receiving water shall not further degrade the existing water quality of the water body. In cases where the natural conditions of a receiving water are of lower quality than the criteria assigned, the natural conditions shall constitute the water quality criteria. Similarly, when the natural conditions of a receiving water are of higher quality than the criteria assigned, the natural conditions shall be protected. More information on Washington State's Antidegradation Policy can be obtained by referring to WAC 173-201A-070.

EPA has reviewed existing records and is unable to determine if ambient water quality is either higher or lower than the designated classification criteria given in chapter 173-201A WAC for most parameters; therefore, the designated classification criteria for this water body will be used in the draft permit. The discharges authorized by the permit should not cause further degradation of the receiving water or loss of beneficial uses.

EPA finds that compliance with the terms and conditions of the permit will be consistent with the water quality standards and the antidegradation implementation procedures of the state of Washington.

E. Permit Expiration

The permit will expire five years from the effective date.

X. References

EPA. 1991. *Technical Support Document for Water Quality-based Toxics Control.* US Environmental Protection Agency, Office of Water, EPA/505/2-90-001. https://www3.epa.gov/npdes/pubs/owm0264.pdf

EPA. 2010. *NPDES Permit Writers' Manual.* Environmental Protection Agency, Office of Wastewater Management, EPA-833-K-10-001. September 2010. https://www3.epa.gov/npdes/pubs/pwm_2010.pdf

EPA. 2014. Water Quality Standards Handbook Chapter 5: General Policies. Environmental Protection Agency. Office of Water. EPA 820-B-14-004. September 2014. https://www.epa.gov/sites/production/files/2014-09/documents/handbook-chapter5.pdf

Washington Department of Ecology's Blau Oyster NPDES permit. https://apps.ecology.wa.gov/paris/PermitDocumentSearch.aspx?PermitNumber=WA0029262 (accessed 4/19/2021)

WAC 173-201A-300. Antidegradation Section of the WQS https://apps.leg.wa.gov/wac/default.aspx?cite=173-201A-300 (accessed 4/19/2021)

State of Washington Water Quality Standards https://www.epa.gov/sites/production/files/2014-12/documents/wawqs.pdf (accessed 11/25/2020)

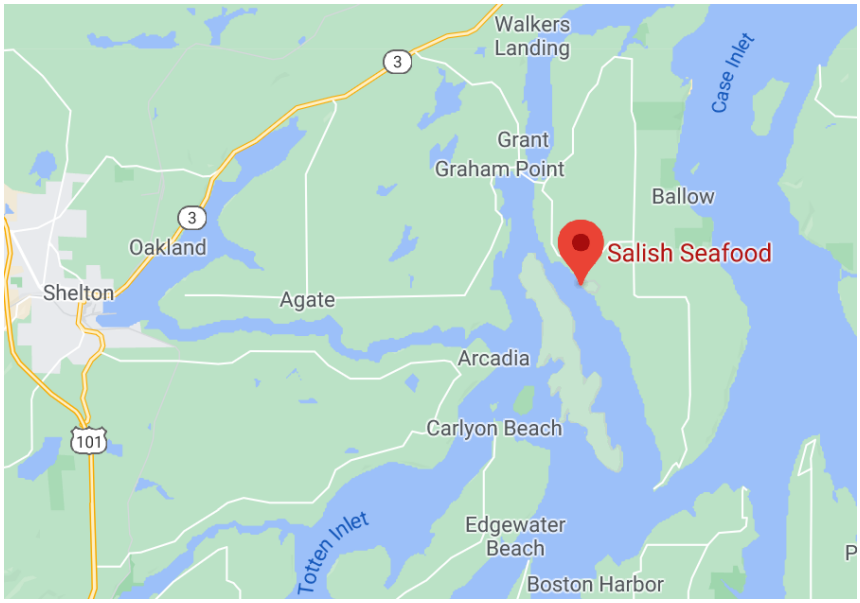
40 CFR 408 Subpart W - Hand-Shucked Clam Processing Subcategory. https://www.law.cornell.edu/cfr/text/40/part-408/subpart-W (accessed 4/19/2021)

40 CFR 408 Subpart Y - Pacific Coast Hand-Shucked Oyster Processing Subcategory. https://www.law.cornell.edu/cfr/text/40/part-408/subpart-Y (accessed 4/19/2021)

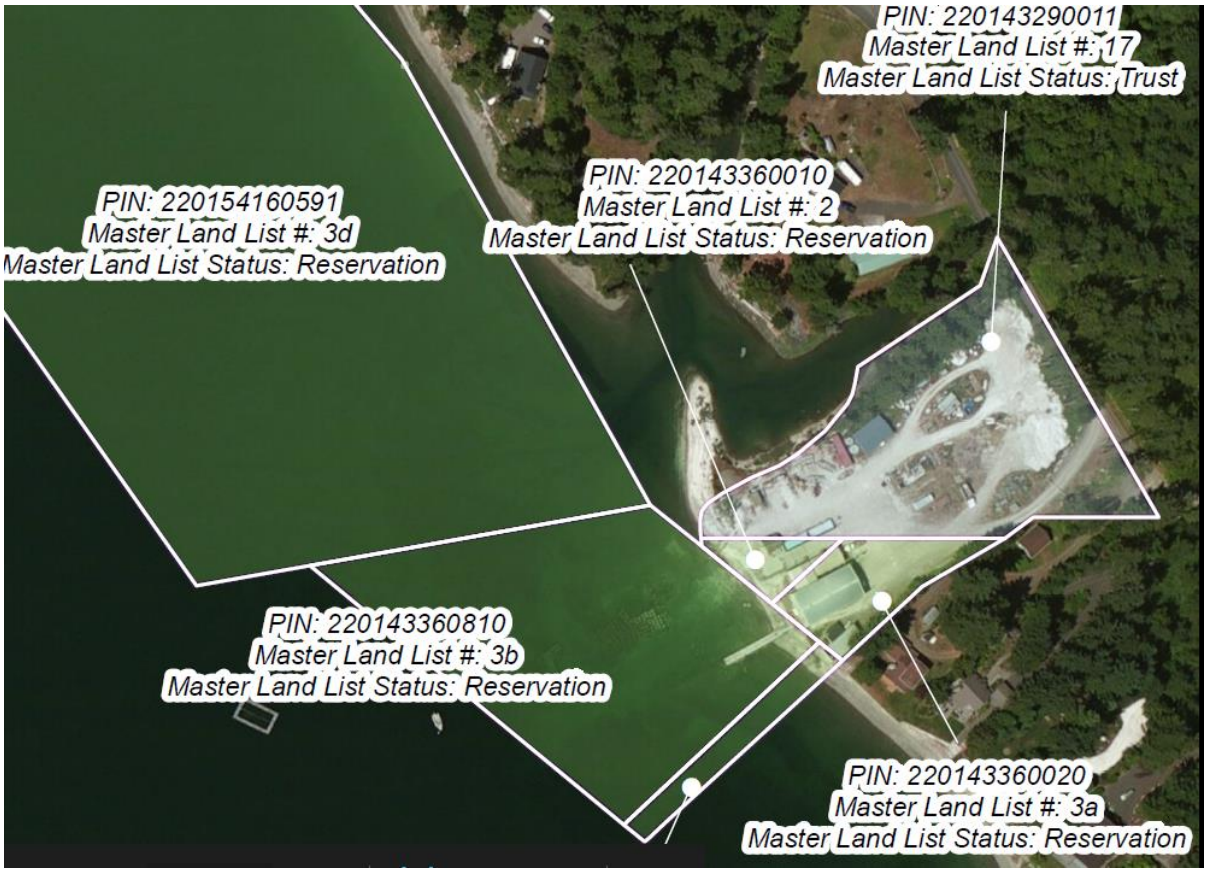
Washington State Department of Health Peale Passage Annual Shellfish Growing Area Review 2019. https://www.doh.wa.gov/Portals/1/Documents/4400/peale.pdf (accessed 4/19/2021)

iPac – USFWS Species List. April 20, 2021.

Appendix A. Facility Information



Source: Google Maps accessed November 10, 2020.



Salish Seafoods Land Status May 21, 2013
Source: Squaxin Island Tribe (via email dated June 3, 2020).

Appendix B. Water Quality Data

Summary of Marine Water Data (SRS) Peale Passage Growing Area

Sampling Event Type: Regulatory

Maximum Number of Samples: 30

Tides Included: All

Station Number	Classification	Date Range	Range (FC/100mL)	Geomean (FC/100mL)	Est. 90th Percentile (FC/100mL)	Meets Standard
78	Approved	2/10/2015 - 12/17/2019	1.7 - 6.8	1.9	2.8	Y
79	Approved	2/10/2015 - 12/17/2019	1.7 - 2.0	1.7	1.9	Y
80	Approved	2/10/2015 - 12/17/2019	1.7 - 4.5	1.8	2.2	Y
81	Approved	2/10/2015 - 12/17/2019	1.7 - 7.8	1.9	2.7	Y
82	Approved	2/10/2015 - 12/17/2019	1.7 - 4.5	1.8	2.3	Y
83	Approved	2/10/2015 - 12/17/2019	1.7 - 4.5	1.9	2.5	Y
84	Approved	2/10/2015 - 12/17/2019	1.7 - 4.5	1.8	2.5	Y
85	Approved	2/10/2015 - 12/17/2019	1.7 - 13.0	2.0	3.4	Y
86	Approved	2/10/2015 - 12/17/2019	1.7 - 4.5	1.9	2.8	Y
87	Approved	2/10/2015 - 12/17/2019	1.7 - 7.8	1.9	2.8	Y
88	Approved	2/10/2015 - 12/17/2019	1.7 - 6.8	1.9	2.8	Y
744	Approved	2/10/2015 - 12/17/2019	1.7 - 4.5	1.9	2.5	Y

The standard for approved shellfish growing waters is fecal coliform geometric mean not greater than 14 organisms/ 100 mL with an estimated 90th percentile not greater than 43 organisms/ 100 mL. The above table shows bacteriological results in relation to program standards.