APPENDIX C

The following are common definitions of terms associated with APDES permits. Not all the terms listed may appear in a permit. Consult the footnote references for a complete list of term and definitions.

TERM	DEFINITION
Alaska Pollutant Discharge Elimination System (APDES) [b]	Means the state's program, approved by EPA under 33 U.S.C. 1342(b), for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits and imposing and enforcing pretreatment requirements under 33 U.S.C. 1317, 1328, 1342, and 1345.
Annual	Means once per calendar year
Aquaculture [h]	Means the cultivation of aquatic plants or animals for human use or consumption
Area(s)-of-Operation	Point-to-Point Area-of-Operation – Means a proposed area for in-transit processing vessel and Inland Water Seafood Waste Discharge Vessels that occur between two points - forms a single line for authorized vessel discharge. Each point-to-point area-of-operation's outer boundary shall be in compliance with Permit Part 2.1.3.3 and Part 2.1.3.4. Circular or a Rectangular Area-of-Operation – Means a proposed area for vessel discharges to occur inside of, either a circular area or a rectangular area. The maximum size of each area-of-operation for Inland Water Seafood Waste Discharge Vessels shall not be greater than 2.0 square nautical miles. The area-of-operation's outer boundary shall be in compliance with Permit Part 2.1.3.3 and Part 2.1.3.4.
Average	Means an arithmetic mean obtained by adding quantities and dividing the sum by the number of quantities
Average Monthly Discharge Limitation [b]	Means the highest allowable average of "daily discharges" over a calendar month calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.
Baseline	Generally speaking, the baseline consists of the mainland low-water line and any offshore islands and additional features that are applicable to the U.S. coast, such as straight lines or closing lines of river mouths, bays, and enclosed harbors from which the breadth of the territorial sea is measured. (Westington, M. A., Slagel, M. J, 2010). See *U.S. Maritime Zones and the*

TERM	DEFINITION
	Determination of the National Baseline at http://ushydro.thsoa.org/hy07/11_01.pdf for more information on baseline
Baseline Committee	Means the interagency committee who reviews and approves the baseline, called the U.S. Baseline Committee, chaired by the Department of State.
Best Management Practices (BMPs) [e]	Means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas.
Biochemical Oxygen Demand (BOD_5) [c]	Means the amount, in milligrams per liter, of oxygen used in the biochemical oxidation of organic matter in five days at 20º C
Bone Meal	Means a by-product made from the bones recovered from seafood processing.
Boundary [d]	Means a line or landmark that serves to clarify, outline, or mark a limit, border, or interface
Bypass [b]	Means the intentional diversion of waste streams from any portion of a treatment facility
Certified Copy of Log	Means a copy of the inspection log where each observer records an observation on a log sheet, signs the log sheet and certifies it, as stated in Appendix A, Part 1.12.5.
Clean Water Act (CWA) [e]	Means the federal law codified at 33 U.S.C. 1251-1387, also referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972.
Color [d]	Means the condition that results in the visual sensations of hue and intensity as measured after turbidity is removed
Commissioner [a]	Means the commissioner of the Alaska Department of Environmental Conservation or the commissioner's designee
Composite Samples	Composite samples shall consist of at least eight equal volume grab samples. 24 hour composite sample means a combination of at least eight discrete samples of equal volume collected at equal time intervals over a 24-hour period at the same location. A "flow proportional composite" sample means a combination of at least eight discrete samples collected at equal time intervals

TERM	DEFINITION
	over a 24-hour period with each sample volume proportioned according to the flow volume. The sample aliquots shall be collected, stored and analyzed within applicable hold times in accordance with procedures prescribed in the most recent edition of *Standard Methods for the Examination of Water and Wastewater*.
Contact Recreation [d]	Means activities in which there is direct and intimate contact with water. Contact recreation includes swimming, diving, and water skiing. Contact recreation does not include wading.
Continuous Coverage	Means seafood waste deposits that are estimated to cover 100% of the seafloor as measured within a three-foot-square sample plot. At DEC's discretion, the area will include boulders, rock outcrops, ridges, and other protrusions within an area of continuous coverage that are not covered by seafood waste.
Criterion [d]	Means a set concentration or limit of a water quality parameter that, when not exceeded, will protect an organism, a population of organisms, a community of organisms, or a prescribed water use with a reasonable degree of safety; a criterion might be a narrative statement instead of a numerical concentration or limit
Daily Discharge [e]	Means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants measured in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with a limitation expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
Datum	A datum defines the position of the spheroid, a mathematical representation of the earth, relative to the center of the earth. It provides a frame of reference for measuring locations on the surface of the earth by defining the origin and orientation of latitude and longitude lines.
Department [a]	Means the Alaska Department of Environmental Conservation
Design Flow [b]	Means the wastewater flow rate that the plant was designed to handle.
Director [e]	Means the commissioner or the commissioner's designee assigned to administer the APDES program or a portion of it, unless the context identifies an EPA director.

TERM	DEFINITION
Discharge [e]	When used without qualification, discharge means the discharge of a pollutant or combination of pollutants.
Discharge of a Pollutant [e]	Means any addition of any pollutant or combination of pollutants to waters of the United States from any point source or to waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft that is being used as a means of transportation. Discharge includes any addition of pollutants into waters of the United States from surface runoff that is collected or channeled by humans, discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other person that do not lead to a treatment works, discharges through pipes, sewers, or other conveyances leading into privately owned treatment works, and does not include an addition of pollutants by any indirect discharger.
Discharge Location	Means a stationary vessel discharge site where the seafood processing vessel intends to anchor and discharge. A circular area with a radius equal to 0.5 nm.
Discontinuous Coverage	Means areas of seafood waste deposits that are estimated to cover 10% or more of the seafloor, but less than 100% coverage, as measured within a three-foot square sample plot.
Dissolved Oxygen (DO) [d]	Means the concentration of oxygen in water as determined either by the Winkler (iodometric) method and its modifications or by the membrane electrode method. The oxygen dissolved in water or wastewater and usually expressed in milligrams per liter or percent saturation.
Effluent [d]	Mean the segment of a wastewater stream that follows the final step in a treatment process and precedes discharge of the wastewater stream to the receiving environment
Estimated	Means a way to estimate the discharge volume and flow rates. Approvable estimations include but are not limited to, the number of persons per day at the facility, volume of potable water produced per day, lift station run time, etc.
Estuary/Estuarine area	Means a semi-enclosed, coastal waterbody with a free connection with the sea and within which seawater is measurably diluted with freshwater derived from land drainage; as allowed for under management under AS 46.03.032, per 33 USC 1251-1387 (the federal Clean Water Act).

TERM	DEFINITION
Excluded Area	Means an area not authorized as a receiving water under the permit, unless the operator complies with Permit Part 1.8 and receives authorization to discharge to the Excluded Area.
Existing Use	Means the protected use classes and subclasses of state waters. For marine waters these uses include water supply; water recreation; growth and propagation of fish, shellfish, other aquatic life, and wildlife; and harvesting for consumption of raw mollusks or other aquatic life. An existing use includes all of these protected uses. See 18 AAC 70.020 for the protected subclasses.
Fecal Coliform Bacteria (FC)[d]	Means those bacteria that can ferment lactose at 44.5° + 0.2°C to produce gas in a multiple tube procedure. Fecal coliform bacteria also means all bacteria that produce blue colonies within 24 ± hours of incubation at 44.5° ± 0.2°C in an M-FC broth medium.
Fish [b]	Means any of the group of cold-blooded vertebrates that live in water and have permanent gills for breathing and fins for locomotion.
Fish Hydrolysate	Means a seafood by-product where solid fish is transformed into a liquid or dry product obtained through various biological processes, sometimes including the addition of enzyme and acid reducers to speed up the hydrolysis process and possible dehydration.
Fish Meal/Powder	Means a seafood solid by-product obtained by removing most of the water and some or all of the oil from fish or fish waste.
Fish Oil	Means a seafood by-product where the oil recovered from the tissue of oily fish such as salmon through a by-product recovery process to be sold as a usable product.
Fishery Resource	Means finfish, mollusks, crustaceans, and any other form of marine animal or plant life, other than marine mammals and birds. Referred to as ‘seafood’.
Fishing Vessel / Barge	Means a vessel/barge that commercially engages in the catching, taking, or harvesting of a fishery resource or an activity that can reasonably be expected to result in the catching, taking, or harvesting of a fishery resource.
Geometric Mean	The geometric mean is the Nth root of the product of N. All sample results of zero will use a value of 1 for calculation of the geometric mean. Example geometric mean calculation: $\sqrt[4]{12x23x34x990} = 55$

TERM	DEFINITION
Gilling	Means the removal of the gills from a fish that does not include removal of the head.
Grab Sample	Means a single instantaneous sample collected at a particular place and time that represents the composition of wastewater only at that time and place
Graywater [c]	Means the wastewater from a laundry, kitchen, sink, shower, bath, or other domestic source that does not contain excrement, urine, or combined storm water.
Gutting	Means the removal of the intestines or entrails, to eviscerate.
Hydrodynamically Energetic Waters	Means waters that will disperse the seafood processing waste before settling, re-suspending and dispersing wastes during high current events, or facilitating the decay and decomposition of the seafood waste.
In-transit	Means seafood processing operations that occur while the processing vessel is not anchored.
Influent	Means untreated wastewater before it enters the first treatment process of a wastewater treatment works.
Inland Water Discharge	Means a receiving water that is more than 0.25 nautical miles from shore and discharge occurs by vessel, landward of the NOAA mapped baseline(s).
Inland Water Seafood Waste Discharge Vessel	Means a vessel (not a processor) that discharges a seafood processor's seafood processing waste and wastewater pollutants to inland waters of the U.S. behind the baseline.
Living Substrate	Means intertidal and seafloor communities of benthic plants (e.g., macroalgae and kelp) and animals (e.g., mussels, tube-building polychaete worms, and erect bryozoans) in dense aggregations. The Habitat Conservation Division of NMFS may be contacted at 907-271-5006 (Anchorage) or 907-586-7235 (Juneau) for further guidance on and the known locations of living substrates and other Habitat Areas of Particular Concern listed under the Essential Fish Habitat section of the Magnuson Fishery Conservation and Management Act.
Marine Sanitation Device	Means any equipment for installation on board a vessel that is designed to receive, retain, treat or discharge sewage or any process to treat such sewage
Maximum Daily Discharge Limitation [e]	Means the highest allowable "daily discharge"

TERM	DEFINITION
Mean [d]	Means the average of values obtained over a specified period and, for fecal coliform analysis, is computed as a geometric mean.
Mean Lower Low Water (MLLW) [d]	Means the tidal datum plane of the average of the lower of the two low waters of each day, as would be established by the National Geological Survey, at any place subject to tidal influence. MLLW serves as the basis for normal baseline.
Measured	Means the actual volume of wastewater discharged using appropriate mechanical or electronic equipment to provide a totalizer reading. Measure does not provide a recorded measurement of instantaneous rates.
Method Detection Limit (MDL) [d]	Means the minimum concentration of a substance (analyte) that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.
Micrograms per liter (µg/L) [d]	Mean the concentration at which one millionth of a gram (10^{-6} g) is found in a volume of one liter
Mid-Depth	Means the depth of the sample location proportional to the water depth at the time of discharge. Mid-depth is approximately half of the distance from the water surface to the seafloor at the location of discharge.
Milligrams per liter (mg/L) [d]	Means the concentration at which one thousandth of a gram (10^{-3} g) is found in a volume of one liter; it is approximately equal to the unit “parts per million (ppm),” formerly of common use.
Mince	Means finely chopped seafood, particularly fish.
Minimum Level (ML)	Means the concentration at which the entire analytical system shall give a recognizable signal and an acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specified sample weights, volumes, and processing steps have been followed. This level is used as the compliance level if the effluent limit is below it.
Mixing Zone [d]	Means an area in a waterbody surrounding or downstream of a discharge where the effluent plume is diluted by the receiving water within which specified water quality criteria may be exceeded.

TERM	DEFINITION
Month	Means a month shall be the time period from the 1st of a calendar month to the last day in the month.
Monthly Average	Means the average of daily discharges over a monitoring month calculated as the sum of all daily discharges measured during a monitoring month divided by the number of daily discharges measured during that month.
Non-Contact Cooling Water [f]	Means water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product, or finished product.
Non-Process Wastewaters	Means any water which, during manufacturing or processing, does not come into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product. Including: refrigerated seawater, non-contact cooling water, boiler water, freshwater pressure relief water, refrigeration/freezer condensate, continuous exchange live tank water, drinking water backwash, air scrubber water, and other non-process water (except sewage water, graywater, or wastewater from processing area floor drains).
Nuisance Discharge	Means seafood processing waste, including 0.5 inch grind solids, which are discharged or stored where animals are attracted to the waste in a manner that creates a threat to animal or human health and safety. An example of an attractive nuisance is the creation of a large mat of seafood waste that then attracts birds and wildlife.
Oil and Grease [g]	Mean those components of a waste water amenable to measurement by the method described in Methods for Chemical Analysis of Water and Wastes, 1971, Environmental Protection Agency, Analytical Quality Control Laboratory, page 217.
Operator / Permittee	Means a company, organization, association, entity, or person who is issued a wastewater permit and is responsible for ensuring compliance, monitoring and reporting as required by the permit
“Other Wastewaters”	Means non-process wastewaters and ice and water used to transfer seafood (catch transfer water) to the seafood processing vessel.
pH [d]	Means a measure of the hydrogen ion concentration of water or wastewater, expressed as the negative logarithm of the hydrogen ion concentration, expressed as moles/L (pH = -log10 (H+)). A pH of 7 is neutral. A pH less than 7 is acidic, and a pH greater than 7 is basic.

TERM	DEFINITION
Point Source [e]	Means any discernible, confined, and discrete conveyance, including but not limited to: any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft form which pollutants are or may be discharged.
Pollutant [e]	Means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under 42 U.S.C. 2011), heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, or agricultural waste discharged into water
Poor Flushing	Means waters with average water currents of less than one third knot within 300 feet of the outfall.
Principal Executive Officer [b]	Means the chief executive officer of the agency or a senior executive officer having responsibility for the overall operations of a principal geographic unit of division of the agency
Processor	Means an operator of a facility or vessel who prepares seafood into a marketable form.
Process Wastewater [e]	Means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product. Including: contact wastewater (e.g. contact cooking or cooling waters, such as retort water, or water used to boil or cool seafood directly), wastewater from floor drains, drains where water or process water has come in contact with seafood loading and unloading areas, water from seafood processing areas and by-product lines; or those waters that have been in contact with seafood, seafood waste, and wastewaters and offal.
Quality Assurance Project Plan	Means a system of procedures, checks, audits, and corrective actions to ensure that all research design and performance, environmental monitoring and sampling, and other technical and reporting activities are of the highest achievable quality.
Quarter or Quarterly	Means the time period of three months based on the calendar year beginning with January
Receiving Water Body [b]	Means waters of the U.S. including: lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, straits, passages, canals, the Pacific Ocean, Gulf of Alaska, Bering Sea, and

TERM	DEFINITION
	Arctic Ocean, in the territorial limits of the state, and all other bodies of surface water, natural or artificial, public or private, inland or coastal, fresh or salt, which are wholly or partially in or bordering the state or under the jurisdiction of the state. (See "Waters of the U.S." at 18 AAC 83.990(66) & AS 46.03.900(37))
Report	Report results of analysis.
Residual Chlorine	Means chlorine remaining in water or wastewater at the end of a specified contact period as combined or free chlorine.
Responsible Corporate Officer [b]	Means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function or any other person who performs similar policy or decision making functions for the corporation. The Responsible Corporate Officer can also be the manager of one or more manufacturing, production, or operating facilities if the requirements of 18 AAC 83.385(a)(1)(B)(i)-(iii) are met.
Responsible Party	The owner of a waste treatment system and/or outfall, or as designated on the NOI as the Responsible Party will be designated as the "Operator". The responsible party may be a company, organization, association, entity, or person who is issued a wastewater permit and is responsible for ensuring compliance, monitoring, and reporting as required by this permit.
Residues	Means floating solids, debris, sludge, deposits, foam, scum, or any other material or substance remaining in a waterbody as a result of direct or nearby human activity
Sample Plot	Means the sampling area, a 3 foot by 3 foot square used in the Seafloor Survey Protocol (Appendix E). Used in measuring percentages of seafood waste coverage.
Sanitary Wastewater	Mean the wastewater discharged from toilets or urinals.
Scupper	Means an opening for draining off water, as from a floor or deck of a vessel.
Seafood	Means the raw material, including freshwater and saltwater fish and shellfish, to be processed in the form in which it is received at the processor.

TERM	DEFINITION
Seafood Processing	Mean the conversion of seafood from a raw to marketable form which involves more than evisceration of fish or other seafood at-sea.
Seafood By-product	Means the process wastewater effluent and seafood waste fluids, organs, flesh, bones, and chitinous shells produced in the conversion of seafood from a raw form to a marketable form that is utilized as source of material in a by-product recovery process line or facility. See also fish meal, bone meal, fish oils, and hydrolysate.
Seafood Processing Waste and Wastewaters	Means the fluids, heads, organs, flesh, fins, bones, skin, chitinous shells, waste and wastewaters produced from the conversion of seafood from a raw form to a marketable form, including any seafood processing lines and by-product commodity line's effluent such as butchering, fish oil, fish meal/powder, canning, stickwater, and/or washed and unwashed seafood mince and/or paste. Includes ice and water used to transfer seafood (i.e., catch transfer water) into the facility and live tank water transferred into the facility.
Secondary Recreation [d]	Means activities in which incidental water use can occur. Secondary recreation includes boating, camping, hunting, hiking, wading, and recreational fishing. Secondary contact recreation does not include fish consumption.
Settleable Solids [d]	Means solid material of organic or mineral origin that is transported by and deposited from water, as measured by the volumetric Imhoff cone method and at the method detection limits specified in method 2540(F), Standard Methods for the Examination of Water and Wastewater, 18th edition (1992)
Severe Property Damage [b]	Means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
Shall	Used in laws, regulations, or directives (including the use in this permit) to express what is mandatory <it *shall* be unlawful to carry firearms>
Sheen [d]	Means an iridescent appearance on the water surface
Shellfish [b]	Means a species of crustacean, mollusk, or other aquatic invertebrate with a shell or shell-like exoskeleton in any stage of its life cycle

TERM	DEFINITION
Stationary Vessel	Means a processing vessel that is anchored at a single location. The vessel will still have some movement as it changes positions due to influences such as currents, wind, or tides.
Stickwater	Means the wastewater collected/produced from a fish meal, fish oil, or fish hydrolysate processing production. Occurs when seafood waste by-products are cooked, pressed and non-soluble protein solids and oils are usually removed by centrifuges, decanters, tricanters, etc. The leftover solids and solubles after by-product recovery and oil recovery.
Suspended Solids	Means insoluble solids that either float on the surface of, or are in suspension in, water, wastewater, or other liquids. The quantity of material removed from wastewater in a laboratory test, as prescribed in *Standard Methods for the Examination of Water and Wastewater* and referred to as non-filterable.
Total Maximum Daily Load (TMDL)	Means the sum of the individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for nonpoint sources and natural background. If the receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure.
Total Suspended Solids (TSS) [f]	Means a measure of the filterable solids present in a sample, as determined by the method specified in 40 CFR § 136 (most current version).
Trace Coverage	Means areas of seafood waste that are estimated to cover less than 10% of the seafloor and having a depth under 0.5- inch, as measured within a three-foot-square sample plot.
Treated Sanitary Wastewater (Vessels)	Means MSD Type II wastewater discharged from a vessel's toilets or urinals.
Twice per year	Means two time periods during the calendar year: October through April and May through September
Unwashed Mince / Paste	Means minced seafood or seafood flesh that is paste consistency that is neither washed, nor dewatered and is processed fresh or frozen into blocks.
Upset [b]	Means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not

TERM	DEFINITION
	include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
Washed Mince / Paste	Means minced / paste seafood or seafood flesh that is washed, dewatered, and is processed fresh or frozen into blocks. In example, surimi, kamaboko, fish sausage, washed seafood carcasses as by-product, and cured surimi products are included in this classification.
Wastewater Treatment	Means any process to which wastewater is subjected in order to remove or alter its objectionable constituents and make it suitable for subsequent use or acceptable for discharge to the environment.
Water Depth	Means the depth of the water between the surface and the seafloor as measured at MLLW, or from the water surface to the bed lands.
Waters of the United States or Waters of the U.S. [e]	Has the meaning given in 18 AAC 83.990(77)
Water Recreation [d]	See contact recreation or secondary recreation
Water Supply [d]	Means any of the waters of the state that are designated in 18 AAC 70 to be protected for fresh water or marine water uses; water supply includes waters used for drinking, culinary, food processing, agricultural, aquacultural, seafood processing, and industrial purposes; "water supply" does not necessarily mean that water in a waterbody that is protected as a supply for the uses listed in this paragraph is safe to drink in its natural state.
Week	Means the time period of Sunday through Saturday
Zone of Deposit [d]	Means the area where the deposit of substances (residues) is allowed on the bottom of marine waters within limits set by the department

NOTES:

a. Definition from AS 46.03.900
b. Definition from 18 AAC 83
c. Definition from 18 AAC 72
d. Definition from 18 AAC 70
e. Definition from 40 CFR 122.2
f. Definition from 40 CFR 401.11

TERM	DEFINITION
g. Definition from 40 CFR 408 h. Definition from 40 CFR 122.25 i. Definition from 33 CFR 328.3(e)	