Appendix A

Standard Conditions

STANDARD CONDITIONS

APDES GENERAL PERMIT

NONDOMESTIC

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Appendix A, Standard Conditions is an integral and enforceable part of the permit. Failure to comply with a Standard Condition in this Appendix constitutes a violation of the permit and is subject to enforcement.

1.0 Standard Conditions Applicable to All Permits

1.1 Contact Information and Addresses

1.1.1 Permitting Program

Documents, reports, and plans required under the permit and Appendix A are to be sent to the following address:

State of Alaska
Department of Environmental Conservation
Division of Water
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, Alaska 99501
Telephone (907) 269-6285
Fax (907) 269-7508
Email: DEC.Water.WQPermit@alaska.gov

1.1.2 Compliance and Enforcement Program

Documents and reports required under the permit and Appendix A relating to compliance are to be sent to the following address:

State of Alaska
Department of Environmental Conservation
Division of Water
Compliance and Enforcement Program
555 Cordova Street
Anchorage, Alaska 99501
Telephone Nationwide (877) 569-4114
Anchorage Area / International (907) 269-4114
Fax (907) 269-4604
Email: dec-wqreporting@alaska.gov

1.2 Duty to Comply

A permittee shall comply with all conditions of the permittee's APDES permit. Any permit noncompliance constitutes a violation of 33 U.S.C 1251-1387 (Clean Water Act) and state law and is grounds for enforcement action including termination, revocation and reissuance, or modification of a permit, or denial of a permit renewal application. A permittee shall comply with effluent standards or prohibitions established under 33 U.S.C. 1317(a) for toxic pollutants within the time provided in the regulations that establish those effluent standards or prohibitions even if the permit has not yet been modified to incorporate the requirement.

1.3 Duty to Reapply

If a permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee must apply for and obtain a new permit. In accordance with 18 AAC 83.105(b), a permittee with a currently effective permit shall reapply by submitting a new application at least 180 days before the existing permit expires, unless the Department has granted the permittee permission to submit an application on a later date. However, the Department will not grant permission for an application to be submitted after the expiration date of the existing permit.

1.4 Need to Halt or Reduce Activity Not a Defense

In an enforcement action, a permittee may not assert as a defense that compliance with the conditions of the permit would have made it necessary for the permittee to halt or reduce the permitted activity.

1.5 Duty to Mitigate

A permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

1.6 Proper Operation and Maintenance

1.6.1 A permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances that the permittee installs or uses to achieve compliance with the conditions of the permit. The permittee's duty to operate and maintain properly includes using adequate laboratory controls and appropriate quality assurance procedures. However, a permittee is not required to operate back-up or auxiliary facilities or similar systems that a permittee installs unless operation of those facilities is necessary to achieve compliance with the conditions of the permit.

1.6.2 Operation and maintenance records shall be retained and made available at the site.

1.7 Permit Actions

A permit may be modified, revoked and reissued, or terminated for cause as provided in 18 AAC 83.130. If a permittee files a request to modify, revoke and reissue, or terminate a permit, or gives notice of planned changes or anticipated noncompliance, the filing or notice does not stay any permit condition.

1.8 Property Rights

A permit does not convey any property rights or exclusive privilege.

1.9 Duty to Provide Information

A permittee shall, within a reasonable time, provide to the Department any information that the Department requests to determine whether a permittee is in compliance with the permit, or whether cause exists to modify, revoke and reissue, or terminate the permit. A permittee shall also provide to the Department, upon request, copies of any records the permittee is required to keep under the permit.

1.10 Inspection and Entry

A permittee shall allow the Department, or an authorized representative, including a contractor acting as a representative of the Department, at reasonable times and on presentation of credentials establishing authority and any other documents required by law, to:

1.10.1 Enter the premises where a permittee's regulated facility or activity is located or conducted, or where permit conditions require records to be kept;

1.10.2 Have access to and copy any records that permit conditions require the permittee to keep;

1.10.3 Inspect any facilities, equipment, including monitoring and control equipment, practices, or operations regulated or required under a permit; and

1.10.4 Sample or monitor any substances or parameters at any location for the purpose of assuring permit compliance or as otherwise authorized by 33 U.S.C. 1251-1387 (Clean Water Act).

1.11 Monitoring and Records

A permittee must comply with the following monitoring and recordkeeping conditions:

1.11.1 Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

1.11.2 The permittee shall retain records in Alaska of all monitoring information for at least three years, or longer at the Department's request at any time, from the date of the sample, measurement, report, or application. Monitoring records required to be kept include:

1.11.2.1 All calibration and maintenance records,

1.11.2.2 All original strip chart recordings or other forms of data approved by the Department for continuous monitoring instrumentation,

1.11.2.3 All reports required by a permit,

1.11.2.4 Records of all data used to complete the application for a permit,

1.11.2.5 Field logbooks or visual monitoring logbooks,

1.11.2.6 Quality assurance chain of custody forms,

1.11.2.7 Copies of discharge monitoring reports, and

1.11.2.8 A copy of this APDES permit.

1.11.3 Records of monitoring information must include:

1.11.3.1 The date, exact place, and time of any sampling or measurement;

1.11.3.2 The name(s) of any individual(s) who performed the sampling or measurement(s);

1.11.3.3 The date(s) and time any analysis was performed;

1.11.3.4 The name(s) of any individual(s) who performed any analysis;

1.11.3.5 Any analytical technique or method used; and

1.11.3.6 The results of the analysis.

1.11.4 Monitoring Procedures

Analyses of pollutants must be conducted using test procedures approved under 40 CFR Part 136, adopted by reference at 18 AAC 83.010, for pollutants with approved test procedures, and using test procedures specified in the permit for pollutants without approved methods.

1.12 Signature Requirement and Penalties

1.12.1 Any application, report, or information submitted to the Department in compliance with a permit requirement must be signed and certified in accordance with 18 AAC 83.385. Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, or other document filed or required to be maintained under a permit, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be subject to penalties under 33 U.S.C. 1319(c)(4), AS 12.55.035(c)(1)(B), (c)(2), and (c)(3) and 46.03.790(g).

1.12.2 In accordance with 18 AAC 83.385, an APDES permit application must be signed as follows:

1.12.2.1 For a corporation, by a responsible corporate officer.

1.12.2.2 For a partnership or sole proprietorship, by the general partner or the proprietor, respectively.

1.12.2.3 For a municipality, state, federal, or other public agency, by either a principal executive officer or ranking elected official.

1.12.3 Any report required by an APDES permit, and a submittal with any other information requested by the Department, must be signed by a person described in Appendix A, Part 1.12.2, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1.12.3.1 The authorization is made in writing by a person described in Appendix A, Part 1.12.2;

1.12.3.2 The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, including the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility; or an individual or position having overall responsibility for environmental matters for the company; and

1.12.3.3 The written authorization is submitted to the Department to the Permitting Program address in Appendix A, Part 1.1.1.

1.12.4 If an authorization under Appendix A, Part 1.12.3 is no longer effective because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Appendix A, Part 1.12.3 must be submitted to the Department before or together with any report, information, or application to be signed by an authorized representative.

1.12.5 Any person signing a document under Appendix A, Part 1.12.2 or Part 1.12.3 shall certify as follows:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

1.13 Proprietary or Confidential Information

1.13.1 A permit applicant or permittee may assert a claim of confidentiality for proprietary or confidential business information by stamping the words "confidential business information" on each page of a submission containing proprietary or confidential business information. The Department will treat the stamped submissions as confidential if the information satisfies the test in 40 CFR §2.208, adopted by reference in 18 AAC 83.010, and is not otherwise required to be made public by state law.

1.13.2 A claim of confidentiality under Appendix A, Part 1.13.1 may not be asserted for the name and address of any permit applicant or permittee, a permit application, a permit, effluent data, sewage sludge data, and information required by APDES or NPDES application forms provided by the Department, whether submitted on the forms themselves or in any attachments used to supply information required by the forms.

1.13.3 A permittee's claim of confidentiality authorized under Appendix A, Part 1.13.1 is not waived if the Department provides the proprietary or confidential business information to the EPA or to other agencies participating in the permitting process. The Department will supply any information obtained or used in the administration of the state APDES program to the EPA upon request under 40 CFR §123.41, as revised as of July 1, 2005. When providing information submitted to the Department with a claim of confidentiality to the EPA, the Department will notify the EPA of the confidentiality claim. If the Department provides the EPA information that is not claimed to be confidential, the EPA may make the information available to the public without further notice.

1.14 Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any action or relieve a permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under state laws addressing oil and hazardous substances.

1.15 Cultural and Paleontological Resources

If cultural or paleontological resources are discovered because of this disposal activity, work that would disturb such resources is to be stopped, and the Office of History and Archaeology, a Division of Parks and Outdoor Recreation of the Alaska Department of Natural Resources (http://www.dnr.state.ak.us/parks/oha/), is to be notified immediately at (907) 269-8721.

1.16 Fee

A permittee must pay the appropriate permit fee described in 18 AAC 72.

1.17 Other Legal Obligations

This permit does not relieve the permittee from the duty to obtain any other necessary permits from the Department or from other local, state, or federal agencies and to comply with the requirements contained in any such permits. All activities conducted and all plan approvals implemented by the permittee pursuant to the terms of this permit shall comply with all applicable local, state, and federal laws and regulations.

2.0 Special Reporting Obligations

2.1 Planned Changes

2.1.1 The permittee shall give notice to the Department as soon as possible of any planned physical alteration or addition to the permitted facility if:

2.1.1.1 The alteration or addition may make the facility a "new source" under one or more of the criteria in 18 AAC 83.990(44); or

2.1.1.2 The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged if those pollutants are not subject to effluent limitations in the permit or to notification requirements under 18 AAC 83.610.

2.1.2 If the proposed changes are subject to plan review, then the plans must be submitted at least 30 days before implementation of changes (see 18 AAC 15.020 and 18 AAC 72 for plan review requirements). Written approval is not required for an emergency repair or routine maintenance.

2.1.3 Written notice must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.2 Anticipated Noncompliance

2.2.1 A permittee shall give seven days' notice to the Department before commencing any planned change in the permitted facility or activity that may result in noncompliance with permit requirements.

2.2.2 Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.3 Transfers

2.3.1 A permittee may not transfer a permit for a facility or activity to any person except after notice to the Department in accordance with 18 AAC 83.150. The Department may modify or revoke and reissue the permit to change the name of the permittee and incorporate such other requirements under 33 U.S.C. 1251-1387 (Clean Water Act) or state law.

2.3.2 Written notice must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.4 Compliance Schedules

2.4.1 A permittee must submit progress or compliance reports on interim and final requirements in any compliance schedule of a permit no later than 14 days following the scheduled date of each requirement.

2.4.2 Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.5 Corrective Information

2.5.1 If a permittee becomes aware that it failed to submit a relevant fact in a permit application or submitted incorrect information in a permit application or in any report to the Department, the permittee shall promptly submit the relevant fact or the correct information.

2.5.2 Information must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.6 Bypass of Treatment Facilities

2.6.1 Prohibition of Bypass

Bypass is prohibited. The Department may take enforcement action against a permittee for any bypass, unless:

2.6.1.1 The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

2.6.1.2 There were no feasible alternatives to the bypass, including use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. However, this condition is not satisfied if the permittee, in the exercise of reasonable engineering judgment, should have installed adequate back-up equipment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

2.6.1.3 The permittee provides notice to the Department of a bypass event in the manner, as appropriate, under Appendix A, Part 2.6.2.

2.6.2 Notice of bypass

2.6.2.1 For an anticipated bypass, the permittee submits notice at least 10 days before the date of the bypass. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the conditions of Appendix A, Parts 2.6.1.1 and 2.6.1.2.

2.6.2.2 For an unanticipated bypass, the permittee submits 24-hour notice, as required in 18 AAC 83.410(f) and Appendix A, Part 3.4, Twenty-four Hour Reporting.

2.6.2.3 Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.6.3 Notwithstanding Appendix A, Part 2.6.1, a permittee may allow a bypass that:

2.6.3.1 Does not cause an effluent limitation to be exceeded, and

2.6.3.2 Is for essential maintenance to assure efficient operation.

2.7 Upset Conditions

2.7.1 In any enforcement action for noncompliance with technology-based permit effluent limitations, a permittee may claim upset as an affirmative defense. A permittee seeking to establish the occurrence of an upset has the burden of proof to show that the requirements of Appendix A, Part 2.7.2 are met.

2.7.2 To establish the affirmative defense of upset, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that:

2.7.2.1 An upset occurred and the permittee can identify the cause or causes of the upset;

2.7.2.2 The permitted facility was at the time being properly operated;

2.7.2.3 The permittee submitted 24-hour notice of the upset, as required in 18 AAC 83.410(f) and Appendix A, Part 3.4, Twenty-four Hour Reporting; and

2.7.2.4 The permittee complied with any mitigation measures required under 18 AAC 83.405(e) and Appendix A, Part 1.5, Duty to Mitigate.

2.7.3 Any determination made in administrative review of a claim that noncompliance was caused by upset, before an action for noncompliance is commenced, is not final administrative action subject to judicial review.

2.8 Existing Manufacturing, Commercial, Mining, and Silvicultural Discharges

2.8.1 In addition to the reporting requirements under 18 AAC 83.410, an existing manufacturing, commercial, mining, and silvicultural discharger shall notify the department as soon as that discharger knows or has reason to believe that any activity has occurred or will occur that would result in:

2.8.1.1 The discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

2.8.1.1.1 One hundred micrograms per liter (100 µg/L);

2.8.1.1.2 Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile, 500 micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol, and one milligram per liter (1 mg/L) for antimony;

2.8.1.1.3 Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 10 AAC 83.310(c)-(g); or

2.8.1.1.4 The level established by the department in accordance with 18 AAC 83.445.

2.8.1.2 Any discharge, on a non-routine or infrequent basis, of a toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

2.8.1.2.1 Five hundred micrograms per liter (500 µg/L);

2.8.1.2.2 One milligram per liter (1 mg/L) for antimony;

2.8.1.2.3 Ten times the maximum concentration value reported for that pollutant in the permit application in accordance with 18 AAC 83.310(c)-(g); or

2.8.1.2.4 The level established by the department in accordance with 18 AAC 83.445.

3.0 Monitoring, Recording, and Reporting Requirements

3.1 Representative Sampling

A permittee must collect effluent samples from the effluent stream after the last treatment unit before discharge into the receiving waters, or as otherwise required in the permit. Samples and measurements must be representative of the volume and nature of the monitored activity or discharge.

3.2 Reporting of Monitoring Results

At intervals specified in the permit, monitoring results must be reported on the APDES discharge monitoring report (DMR) form, as revised as of March 1999, adopted by reference.

3.2.1 Monitoring results shall be summarized each month on the DMR or an approved equivalent report. The permittee must record the lab result on the DMR by the 15th day of the month following when the samples were taken.

3.2.2 The permittee shall provide copies of the DMR and summarize all other monitoring results on the annual report form or approved equivalent. The permittee shall submit its annual report at the interval specified in the permit. The permittee must sign and certify all DMRs and all other reports in accordance with the requirements of Appendix A, Part 1.12, Signatory Requirements and Penalties. All signed and certified, legible, original DMRs and all other documents and reports must be submitted to the Department at the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

3.2.3 If, during the period when this permit is effective, the Department makes available electronic reporting, the permittee may, as an alternative to the requirements of Appendix A, Part 3.2.2, submit monthly DMRs electronically by the 15th day of the following month in accordance with guidance provided by the Department. The permittee must certify all DMRs and other reports, in accordance with the requirements of Appendix A, Part 1.12, Signatory Requirements and Penalties. The permittee must retain the legible originals of these documents and make them available to the Department upon request.

3.3 Additional Monitoring by Permittee

If the permittee monitors any pollutant more frequently than the permit requires using test procedures approved in 40 CFR Part 136, adopted by reference in 18 AAC 83.010, or as specified in this permit, the results of that additional monitoring must be included in the calculation and reporting of the data submitted in the DMR. All limitations that require averaging of measurements must be calculated using an arithmetic means unless the Department specifies another method in the permit. Upon request by the Department, the permittee must submit the results of any other sampling and monitoring regardless of the test method used.

3.4 Twenty-four Hour Reporting

A permittee shall report any noncompliance event that may endanger health or the environment as follows:

3.4.1 A report must be made:

3.4.1.1 Orally within 24 hours after the permittee becomes aware of the circumstances, and

3.4.1.2 In writing within five days after the permittee becomes aware of the circumstances.

3.4.2 A report must include the following information:

3.4.2.1 A description of the noncompliance and its causes, including the estimated volume or weight and specific details of the noncompliance;

3.4.2.2 The period of noncompliance, including exact dates and times;

3.4.2.3 If the noncompliance has not been corrected, a statement regarding the anticipated time the noncompliance is expected to continue; and

3.4.2.4 Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

3.4.3 An event that must be reported within 24 hours includes:

3.4.3.1 An unanticipated bypass that exceeds any effluent limitation in the permit (see Appendix A, Part 2.6, Bypass of Treatment Facilities).

3.4.3.2 An upset that exceeds any effluent limitation in the permit (see Appendix A, Part 2.7, Upset Conditions).

3.4.3.3 A violation of a maximum daily discharge limitation for any of the pollutants listed in the permit as requiring 24-hour reporting.

3.4.4 The Department may waive the written report on a case-by-case basis for reports under Appendix A, Part 3.4 if the oral report has been received within 24 hours of the permittee becoming aware of the noncompliance event.

3.4.5 The permittee may satisfy the written reporting submission requirements of Appendix A, Part 3.4 by submitting the written report via e-mail, if the following conditions are met:

3.4.5.1 The Noncompliance Notification Form or equivalent form is used to report the noncompliance.

3.4.5.2 The written report includes all the information required under Appendix A, Part 3.4.2;

3.4.5.3 The written report is properly certified and signed in accordance with Appendix A, Parts 1.12.3 and 1.12.5.;

3.4.5.4 The written report is scanned as a PDF (portable document format) document and transmitted to the Department as an attachment to the e-mail; and

3.4.5.5 The permittee retains in the facility file the original signed and certified written report and a printed copy of the conveying email.

3.4.6 The e-mail and PDF written report will satisfy the written report submission requirements of this permit provided the e-mail is received by the Department within five days after the time the permittee becomes aware of the noncompliance event and the e-mail and written report satisfy the criteria of Part 3.4.5. The e-mail address to report noncompliance is: dec-wqreporting@alaska.gov

3.5 Other Noncompliance Reporting

A permittee shall report all instances of noncompliance not required to be reported under Appendix A, Parts 2.4 (Compliance Schedules), 3.3 (Additional Monitoring by Permittee), and 3.4 (Twenty-four Hour Reporting) at the time the permittee submits monitoring reports under Appendix A, Part 3.4 (Reporting of Monitoring Results). A report of noncompliance under this part must contain the information listed in Appendix A, Part 3.4.2 and be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

4.0 Penalties for Violations of Permit Conditions

Alaska laws allow the State to pursue both civil and criminal actions concurrently. The following is a summary of Alaska law. Permittees should read the applicable statutes for further substantive and procedural details.

4.1 Civil Action

Under AS 46.03.760(e), a person who violates or causes or permits to be violated a regulation, a lawful order of the Department, or a permit, approval, or acceptance, or term or condition of a permit, approval or acceptance issued under the program authorized by AS 46.03.020 (12) is liable, in a civil action, to the state for a sum to be assessed by the court of not less than $500 nor more than $100,000 for the initial violation, nor more than $10,000 for each day after that on which the violation continues, and that shall reflect, when applicable:

4.1.1 Reasonable compensation in the nature of liquated damages for any adverse environmental effects caused by the violation, that shall be determined by the court according to the toxicity, degradability, and dispersal characteristics of the substance discharged, the sensitivity of the receiving environment, and the degree to which the discharge degrades existing environmental quality;

4.1.2 Reasonable costs incurred by the state in detection, investigation, and attempted correction of the violation;

4.1.3 The economic savings realized by the person in not complying with the requirements for which a violation is charged; and

4.1.4 The need for an enhanced civil penalty to deter future noncompliance.

4.2 Injunctive Relief

4.2.1 Under AS 46.03.820, the Department can order an activity presenting an imminent or present danger to public health or that would be likely to result in irreversible damage to the environment be discontinued. Upon receipt of such an order, the activity must be immediately discontinued.

4.2.2 Under AS 46.03.765, the Department can bring an action in Alaska Superior Court seeking to enjoin ongoing or threatened violations for Department-issued permits and Department statutes and regulations.

4.3 Criminal Action

Under AS 46.03.790(h), a person is guilty of a Class A misdemeanor if the person negligently:

4.3.1 Violates a regulation adopted by the Department under AS 46.03.020(12);

4.3.2 Violates a permit issued under the program authorized by AS 46.03.020(12);

4.3.3 Fails to provide information or provides false information required by a regulation adopted under AS 46.03.020(12);

4.3.4 Makes a false statement, representation, or certification in an application, notice, record, report, permit, or other document filed, maintained, or used for purposes of compliance with a permit issued under or a regulation adopted under AS 46.03.020(12); or

4.3.5 Renders inaccurate a monitoring device or method required to be maintained by a permit issued or under a regulation adopted under AS 46.03.020(12).

4.4 Other Fines

Upon conviction of a violation of a regulation adopted under AS 46.03.020(12), a defendant who is not an organization may be sentenced to pay a fine of not more than $10,000 for each separate violation (AS 46.03.790(g)). A defendant that is an organization may be sentenced to pay a fine not exceeding the greater of: (1) $200,00; (2) three times the pecuniary gain realized by the defendant as a result of the offense; or (3) three times the pecuniary damage or loss caused by the defendant to another, or the property of another, as a result of the offense (AS 12.55.035(c)(B), (c)(2), and (c)(3).

Appendix B

Abbreviations and Acronyms

Abbreviations and Acronyms

18 AAC 70	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 70: Quality Standards. Available at: **2003** http://dec.alaska.gov/water/wqsar/wqs/pdfs/70mas.pdf **2012** http://dec.alaska.gov/commish/regulations/pdfs/18%20AAC%2070.pdf
18 AAC 72	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 72: Wastewater Disposal. Available at:http://dec.alaska.gov/commish/regulations/pdfs/18%20AAC%2072.pdf
18 AAC 83	Alaska Administrative Code Title 18 Environmental Conservation Chapter 83: Alaska Pollutant Discharge Elimination System Program. Available at: http://dec.alaska.gov/commish/regulations/pdfs/18%20AAC%2083.pdf
33 CFR Part 159	Code of Federal Regulations Title 33: Navigation and Navigable Waters. Available at: http://www.ecfr.gov/cgi-bin/ECFR?page=browse
40 CFR	Code of Federal Regulations Title 40: Protection of Environment. Available at http://www.ecfr.gov/cgi-bin/ECFR?page=browse
401 Certification	State of Alaska's July 2001 CWA Section 401 Certificate of Reasonable Assurance
ADF&G	Alaska Department of Fish and Game
AML	Average Monthly Limit
APDES	Alaska Pollutant Discharge Elimination System, Alaska's national program for issuing, modifying, revoking, and reissuing, terminating, monitoring, and enforcing permit…under sections 307, 402, 318, and 405 of the Clean Water Act
AS 46.03	Alaska Statutes Title 46, Chapter 03: Environmental Conservation. Available at http://www.legis.state.ak.us/default.htm
ASP	Amnesic Shellfish Poisoning
ATP	Adenosine-Triphosphate
BAF	Bubble Air Floatation
BAT	Best Available Technology Economically Achievable
BCT	Bert Conventional Pollutant Control Technology
BMP	Best Management Practices
BOD	Biochemical Oxygen Demand
BOD_5	Biochemical Oxygen Demand 5-Day Test
BPJ	Best Professional Judgment
BPT	Best Practicable Control Technology
BSAI	Bering Sea and Aleutian Island
CD	Compact Disc
CFR	Code of Federal Regulation. Available at: http://www.ecfr.gov/cgi-bin/ECFR?page=browse
CHA	Critical Habitat Area
COD	Chemical Oxygen Demand
CWA	Clean Water Act
DAF	Dissolved Air Flotation

Abbreviations and Acronyms

DEC	Alaska Department of Environmental Conservation or The Department. Available at http://dec.alaska.gov/
DECAL	Simplified Deposition Calculation
DMA	Dimethylamine
DMR	Discharge Monitoring Report
DO	Dissolved Oxygen
DPS	Distinct Population Segment
DSP	Diarrheic Shellfish Poisoning
DVD	Digital Versatile Disc
ECHO	EPA's Enforcement & Compliance History Online (ECHO)
EFDC	Environmental Fluid Dynamics Code
EFH	Essential Fish Habitat
e.g.	Exempli gratia, Latin for 'for example'
ELG	Effluent Limitation Guideline
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act of 1973
ETS	Endangered and Threatened Species
FC	Fecal Coliform Bacteria
FDA	Food and Drug Administration
GIS	Geographic Information System
gpd	Gallons per day
GOA	Gulf of Alaska
GP	General Permit
HACCP	Hazard Analysis and Critical Control Point
HCL	Hydrochloric Acid
K	Decay Constant
LTF	Log Transfer Facility
MBR	Membrane Bioreactors
MDL	Method Detection Limits
mgd	Million gallons per day
mg/L	Milligram per liter
ML	Minimum Level
ml	Milliliter
MLLW	Mean Lower Low Water
MSD	Marine Sanitation Device
MSGP	Multi-Sector General Permit
N/A	Not Applicable
Na2S2O5	Sodium Pyrosulphite
NaCl	Sodium Chloride
NaOH	Sodium Hydroxide

Abbreviations and Acronyms

NH_3	Ammonia
NH_4^+	Ammonium
nm	Nautical mile
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NODA	Notice of Data Availability
NOI	Notice of Intent
NOT	Notice of Transfer
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NSP	Neurotoxic Shellfish Poisoning
NSPS	New Source Performance Standards
O&G	Oil and Grease
ODCE	Ocean Discharge Criteria Evaluation
OHWM	Ordinary High Water Mark
OSHA	Occupational Safety and Health Administration
PAZOD	Project Area Zone of Deposit
pH	A measure, in Standard Units (SU), of the hydrogen-ion concentration in a solution. On the pH scale (0 –14), a value of 7 at 25°C represents a neutral condition. Decreasing values, below 7, indicate increasing hydrogen-ion concentration (acidity), increasing values, above 7, indicate decreasing hydrogen-ion concentration (alkalinity).
POTW	Publicly Owned Treatment Works
PSP	Paralytic Shellfish Poisoning (PSP)
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
ROVs	Remotely Operated Vehicles
RTC	Response to Comments
SBRs	Sequence Batch Reactors
SPI	Sediment Profile Imaging
SU	Standard Units
SWPPP	Storm Water Pollution Prevention Plans
T/E sp	Threatened or Endangered Species
TBEL	Technology-Based Effluent Limitations
TDS	Total Dissolved Solids
TMA	Trimethylamine
TMDL	Total Maximum Daily Load
TMS	Tether Management System
TRC	Total Residual Chlorine
TSS	Total Suspended Solids
TVBN	Total Volatile Base Nitrogen

Abbreviations and Acronyms

µg/l	Micrograms per liter
USFWS	United States Fish and Wildlife Service
U.S.	United States
U.S.C.	United States Code
USCG	United States Coast Guard
USGS	United States Geologic Survey
VGP	Vessel General Permit
WASP	Water Quality Analysis Simulation Program
WQBEL	Water Quality-Based Effluent Limitations
WQS	Water Quality Standards
ZOD	Zone of Deposit

Appendix C

Definitions

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.
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 island 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 Determination of the National Baseline at http://ushydro.thsoa.org/hy07/11_01.pdf for more information on baseline.
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.
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.
Community Grinder	Those community, Non-Governmental Organization (NGO), government (federal, state, city or borough owner) or private entity discharging seafood waste as allowed under Part 1.1.3. Community Grinders are installed as a community service to offer community members a central location to provide grinding and discharge services for seafood waste, but may not necessarily "process" seafood (bring seafood to a marketable form). Additionally, a Community Grinder may also be located at or near a seafood processing facility, providing grinding and discharges services to the community and multiple small seafood processing facilities in the surrounding community. The owner of the grinder and outfall is the Responsible Party.
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 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*.
Construction	Means any placement, assembly, or installation of facilities or equipment (including contractual obligations to purchase such facilities or equipment) at the premises where such equipment will be used, including preparation work at such premises" (see Section 306(a) of the CWA), a number of activities may give rise to new source status.
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 found to have 95% or greater areal coverage within a 3-foot by 3-foot sample plot as measured along a transect of the seafloor. For a permittee discharging ground waste, the surveyor shall use a seafood waste deposition threshold which is one-half inch or thicker on the seafloor as the minimum detection level. For a permittee discharging screened waste, no minimum detection level applies to the seafood waste deposit thickness. 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.
Cooling Water [f]	Means once-through, non-contact cooling water.

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 with limitations expressed 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.
Detectable	Means any amount of observable seafood waste deposits. In general, seafloor surveys have reported that seafood deposits must be greater than 2% coverage in the 3-foot by 3-foot sample plot to be evident.
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.
Discharge [e]	Means, when used without qualification, the discharge of a pollutant.
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.
Discontinuous Coverage	Means areas of seafood waste deposits that are estimated to cover 10% or more of the seafloor, but less than 95%, within a 3-foot by 3-foot sample plot. For a permittee discharging ground waste, the surveyor shall use a seafood waste deposition threshold which is one-half inch or thicker on the seafloor as the minimum detection level. For a permittee discharging screened waste, no minimum detection level applies to the seafood waste deposit thickness.

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.
Domestic Wastewater [c]	Means waterborne human wastes or graywater derived from dwellings, commercial buildings, institutions, or similar structures. "Domestic wastewater" includes the contents of individual removable containers used to collect and temporarily store human wastes or sewage.
Ecosystem [d]	Means a system made up of a community of animals, plants, and bacteria and the system's interrelated physical and chemical environment.
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).
Effluent [d]	Means 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 determine the discharge volume and flow rates. Approvable estimations include, but are not limited to, the lift station run time combined with pump speeds, averaging the direct volume measurements over several time-periods correlated to commodity line production amounts, etc.
Excluded area	Means an area not authorized as a receiving water under the permit, unless the operator complies with Part 1.7 and receives authorization to discharge to the Excluded Area.
Existing Use [d]	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.
Existing Source [b]	Existing source means any source which is not a new source or a new discharger those constructed, or the use of equipment that was installed, prior to December 1, 1975. See definition for Construction, 'New Source', and Source.
Facility (ies)	Means those seafood processing plants or Community Grinding systems located onshore (land); those plants or systems located on pilings; and/or barges and vessels anchored next to a seafood processing dock at a single location where seafood processing or seafood processing plant support is occurring on the barge/vessel. Throughout the permit or fact sheet the words "facilities or equipment" can be used interchangeably

	with the term “source”, and “building, structure, facility, or installation.”
Fecal Coliform Bacteria (FC) [d]	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 in a membrane filtration procedure within 24 ± 2 hours of incubation at 44.5° + 0.2°C in an M-FC broth.
Fish [d]	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 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.
Fish Protein	Means a minced, paste or ground seafood product that may be made up of multi-species. In example, ‘fish protein’ (contains one or more of the following: pollock, cod, and/or Pacific whiting, salmon, etc).
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 results in the catching, taking, or harvesting of a fishery resource.
Fixed Location	Means the outfall(s) (past or present) of an onshore facility or the discharge location of a vessel within a circular area with a radius equal to one-half (nm) nautical mile.
Food Ingredients, Additives, & Colors	As defined by the FDA 21 CFR.
Garbage	Means all kinds of victual, domestic and operational waste, excluding fresh seafood and part thereof, generated during normal operation and liable to be disposed of continuously or periodically except dishwater, graywater and those substances that are defined in other Annexes to MARPOL 73/78.
Geometric Mean	The geometric mean is the N^{th} 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: $\sqrt[4]{12x23x34x990} = 55$
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 wastewater from a laundry, kitchen, sink, shower, bath, or other domestic source that does not contain excrement, urine, or combined storm water.
Hydrodynamically energetic waters	Means waters that will disperse the seafood processing waste before settling, re-suspend and disperse wastes during high current events, or facilitate the decay and decomposition of the seafood waste.
Hydrolysate	Means the liquid or solid product generated by enzymatically digesting seafood waste.
Influent	Means untreated wastewater before it enters the first treatment process of a wastewater treatment works.
Internal Outfall	Means those discharge lines (outfalls) used to monitor a specified wastewater stream before it mixes with another wastewater stream.
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.
Macroalgae and Microalgae Processing	Means processing activities associated with those marine plants.
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”.
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 Geodetic Survey, at any place subject to tidal influence.
Measured	Means the actual volume of wastewater discharged using appropriate mechanical or electronic equipment to provide a totalized 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 (mg/L) [d]	Means 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]	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.
Month	Means 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.
Moored/Docked Support Vessels	Means those vessels that moor or dock next to a seafood processing facility, performing or providing seafood processing support services such as additional processing capabilities or freezing services.
New Source [e]	Under the CWA, any source, the construction of which is commenced after promulgation Means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced: a.) After promulgation of standards of performance under Section 306 of the CWA which are applicable to such source, or b.) After proposal of standards of performance in accordance with Section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 of the CWA within 120 days of their proposal. When reviewing 40 CFR 122.29 for Criteria for new source determination for Seafood Processing's "new source" this is the placement, assembly or installation of facilities or equipment which commenced after December 1, 1975. EPA has previously determined that a newly constructed facility is a new source even if its discharge is conveyed through an existing waste treatment system. 49 Fed. Reg. 38044 (Sept. 26, 1984). Note, in EPA's interpretive memo, where an owner or operator makes changes *only* to its wastewater treatment systems, and no changes occur in the production or wastewater

	generating processes of the plant, the source should not be reclassified as a new source.
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, air scrubber water, wastewater generated from hand washing directly related to and located in the seafood processing area, and other non-process water (except domestic wastewater, graywater or wastewater from processing area floor drains).
Non-Remote Processor [g]	Mean a seafood processing facility or by-product recovery facility located in a designated "processing center" or "population center" as described in 40 CFR Part 408.
Nuisance Discharge	Means, a substantial and unreasonable interference with the use or enjoyment of real property, including water. Including seafood processing effluent discharges that 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.
Oil and Grease [g]	Means 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, and utilizing approved methods, per Title 40 Code of Federal Regulations (CFR) Part 136 (Guidelines Establishing Test Procedures for the Analysis of Pollutants), adopted by reference at 18 AAC 83.010(f).
Onshore Facility	Means a seafood processing facility constructed on land or a processing vessel moored to a permanent structure such as a dock, pier, or permanent anchors acting as a support facility to the onshore facility, or a moored vessel discharging though an onshore facility's outfall. Most seafood processing facilities in Alaska are located next to the ocean or a river to allow the transfer of raw seafood to the processing facility and the discharge of the seafood processing waste to a waters of the U.S.
Operator / Permittee [b]	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 this permit.
Ordinary High Water Mark [i]	Means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.
"Other Wastewaters"	Means non-process wastewaters and ice and water used to transfer seafood (catch transfer water) to the facility.

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.
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 average water currents of less than one third (0.33) of a knot within 300 feet of an 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.
Process Wastewater [e]	Means based on definition of 'process wastewater' found in 18 AAC 83.990(54), 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, byproduct, or waste product. Including, but not limited to: 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 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; ice and water used to transfer seafood (i.e. catch transfer water) into the facility and live tank water transferred into the facility.
Processor	Operator of a facility who prepares raw fish or shellfish into a marketable form.
Project Area Zone of Deposit (ZOD)	Means the total area of the seafloor bottom in marine or estuarine waters within which DEC has authorized and limited the deposit of substances in exceedance of the water quality criteria in 18 AAC 70.020(b) and the antidegradation requirement in 18 AAC 70.010(c). The project area ZOD includes the entire operating area of an onshore seafood processing facility, including those adjacent to the facility, including the following: seafood transfer devices; vessel and barge loading and unloading areas; offshore processing areas for supporting vessels and barges; bulkheads, ramps, floating walkways, docks, pilings, dolphins, anchors, buoys and other marine appurtenances, outfall locations and the length of the outfall line(s) connecting the facility to the point(s) of discharge; as well as previous outfall discharge locations

	that have no record of historical seafloor survey; and the bedland areas underlying and connecting these features.
Quality Assurance Project Plan (QAPP)	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.
Readily Visible	The readily-visible receiving water and shoreline areas are defined as the receiving water area that a shore-based trained personnel can see the water areas without being blocked by buildings or ships. The water's visible area may vary with weather (e.g. fog), sea conditions (waves) and where the observer is located (standing). As a result, the extent of the readily-visible receiving water area will vary from day to day based on weather and sea conditions and should be noted as part of each daily monitoring event. Shoreline observations of where residues typically wash ashore may need to be made off the permittee's parcel.
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 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(77)).
Recorded	Means a permanent record using mechanical or electronic equipment to provide a totalized reading, as well as a record of instantaneous readings.
Remote Processor [g]	Means a seafood processing facility not located in a designated "processing or population center" as described in 40 CFR Part 408. Most seafood processing facilities in Alaska are designated as "Remote".
Report [b]	Report results of analysis.
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.
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 a sampling area, 3-foot by 3-foot square, used in the Seafloor Survey Protocol (Appendix F), used in measuring percentages of seafood waste coverage.
Sampling Day	Means any consecutive 24-hour sampling period.
Scupper	Means an opening for draining off water, as from a floor or the roof of a building.
Seafloor Survey Area	To include the entire marine floor operating area where seafood waste deposits may be found. Seafloor areas surrounding a permittee's seafood processing facility, seafloor areas surrounding: seafood transfer devices; vessel and/or barge loading and unloading areas; seafloor areas under bulkheads, ramps, floating walkways, docks, pilings, dolphins, anchors, buoys and other marine appurtenances; outfall terminus location(s) and the length of the outfall line connecting the facility to the point of discharge. Additionally, the survey shall include any seafood waste found at previous outfall terminus locations for those outfalls that have no record of historical seafloor survey; and the marine water and seafloor underlying and connecting these features.
Seafood [g]	Means the raw material, including freshwater and saltwater fish and shellfish, to be processed from the form in which it is received at a seafood processing plant.
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, hydrolysate.
Seafood Processing	Means the conversion of seafood from a raw to marketable form which involves more than evisceration of fish or other seafood at-sea.
Seafood Processing Waste and Wastewaters	Means the water, 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.
Seasons A, B	Means the Bering Sea fishing openings: Generally, the seasons run as follows - Season A: January - May; Season B June – October.
Seasonal Facility	Means a facility that only processes seafood for a limited amount of time each calendar year and then the facility shuts down for three or more months before beginning processing again.
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), adopted by reference in 18 AAC 70.020(c)(1).
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.
Sewage [a]	Means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes.
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.
Significant Industrial User (SIU)[b]	Means an indirect discharger that is the focus of control efforts under the national pretreatment program, includes all indirect dischargers subject to national categorical pretreatment standards, and all other indirect dischargers that contribute 25,000 gpd or more of process wastewater, or which make up five percent or more of the hydraulic or organic loading to the municipal treatment plant, subject to certain exceptions [40 CFR $403.3(t)].
Single Discharge Location	Means the outfall(s) or port discharge locations (past and present) of an onshore facility.
Source	Mean any building, structure, facility or installation from which there is or may be a discharge of pollutants.
Spoiled Seafood Waste and Wastewaters	Means those wastes and wastewaters associated with putrid, raw (non-processed) fish and other aquatic animals which had previously been intended for seafood processing and spoiled or unsold, hydrolysate, fish meal, fish oil.
Stickwater	Means the wastewater collected produced from a fish meal, fish oil or fish hydrolysate processes production. Occurs when where fish processing byproducts 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.
Support Facility, Vessel(s) or Barge(s)	Means vessels and/or barges anchored next to a seafood processing dock or shoreline location where seafood processing (including freezing activities) is occurring on the vessel / barge on behalf of the onshore facility. This does not include tender vessels who are only transporting seafood from the fishing vessels to the seafood processing facility/vessel.

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.
Totalizer	Means a piece of equipment used with flow meters that displays the total flow on a real time basis, measuring the total flow of a media over a given time period. Also referred to as a flow totalizer.
Total Maximum Daily Load (TMDL)	The sum of the individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for nonpoint sources and natural background. If 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 Residual Chlorine	Means chlorine remaining in water or wastewater at the end of a specified contact period as combined or free chlorine.
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 detectable to 9% areal coverage within a 3-foot by 3-foot sample plot. For a permittee discharging ground waste, the surveyor shall use a seafood waste deposition threshold which is one-half inch or thicker on the seafloor as the minimum detection level; additionally, trace deposits are also those seafood waste deposits that are less than one-half inch (½") thickness in the sample plot, no matter what the percentage of cover. For a permittee discharging screened waste, no minimum detection level applies to the seafood waste deposit thickness.
Treated Sanitary Wastewater (Vessels)	Means MSD Type II wastewater discharged from a vessel's toilets or urinals.
Twice per year (2 per year)	Means two time periods during the calendar year: October through April and May through September.
Unwashed Mince / Unwashed 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 effluent limitations because of factors beyond the reasonable control of the operator. An upset does not 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 / Washed Paste	Means a washed mince or washed paste seafood or seafood flesh that is washed, dewatered, and is processed fresh or frozen into blocks. In example, key ingredients in surimi, kamaboko, fish sausage, washed seafood carcasses as by-product, and cured surimi products are included in this classification.
Wastewater Treatment [c]	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.

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

Appendix D

Facility Specific Information

Table D1 Seafood Processing Facilities General Information
Discharging to Marine / Estuarine [b] Waters

Previous NPDES Authorization Number (Link to NOI)	Facility Name [a]	Receiving Water (Link to Map)	Depth of Discharge (Feet MLLW)	Mixing Zone Size (Radius in Feet)	Project Area ZOD [c] (Yes/No)	Located in Excluded Area Waterbody (Table D3)
AKG520090	Alaska General Seafoods Ketchikan Plant (Major)	Tongass Narrows	-68	100	Yes	No
AKG520168	Alaska General Seafoods Naknek Seafood Plant (Estuarine)	Naknek River	-0.5	100	Yes	No
AKG520528	Alaska Glacier Seafoods Juneau Plant	Auke Bay	-10	100	No ZOD	Yes
AKG520402	Alaska Omega Nutrition Inc	Cook Inlet	-18	100	Yes	No
AKG520056	Alaska Seafood Holdings Hoonah Cold Storage	Port Frederick	-80	100	Yes	No
New	Alaska Wild Seafood Partners LLC	Orca Inlet	-25	100	Yes	No
New	Alaskas Best Seafood LLC (Estuarine)	Nushagak Bay	-20	100	No ZOD	No
AKG520337	Atka Pride Seafoods Atka Plant	Nazan Bay	-30	100	Yes	Yes
	Bering Select LLC					
New	Big Creek Fisheries Big Creek Plant (Estuarine)	Big Creek - Bristol Bay	-15	100	Yes	No
New	Bristol Bay Borough Naknek Grinder (Estuarine)	Naknek River	-15	100	Yes	No
AKG520524	Copper River Seafoods Cordova Plant	Orca Inlet	-37	100	Yes	No

Table D1 Seafood Processing Facilities General Information
Discharging to Marine / Estuarine [b] Waters

Previous NPDES Authorization Number (Link to NOI)	Facility Name [a]	Receiving Water (Link to Map)	Depth of Discharge (Feet MLLW)	Mixing Zone Size (Radius in Feet)	Project Area ZOD [c] (Yes/No)	Located in Excluded Area Waterbody (Table D3)
AKG520483	Copper River Seafoods Kenai Plant (Estuarine)	Kenai River	-10	100	Yes	No
AKG520138	Copper River Seafoods Naknek Plant (Estuarine)	Naknek River	-45	100	Yes	No
New	Copper River Seafoods Togiak Plant (Estuarine)	Togiak Bay	-10	100	Yes	Yes
AKG520478	Double E Foods Pacific Star Seafoods (Estuarine)	Kenai River	-15	100	Yes	No
AKG520536	E&E Foods Inc. dba Coffee Point Seafoods Egegik Large Plant (Estuarine)	Egegik Bay	-10	100	Yes	Yes
AKG520487	E&E Foods Inc. dba Pacific Star Seafoods Kasilof Plant (Estuarine)	Kasilof River	-5	100	Yes	No
AKG520480	E&E Foods Inc.dba Pacific Star Seafoods Kenai Plant (Estuarine)	Kenai River	-5	100	Yes	No
AKG520445	EC Phillips & Son Craig Plant	Solids sent to Ketchikan Plant	N/A	N/A	No ZOD	No
AKG520001	EC Phillips and Son Ketchikan Seafood Plant	Tongass Narrows	-40	100	Yes	No
AKG520037	Ekuk Fisheries Ekuk Plant	Nushagak Bay	-10	100	Yes	No

Table D1 Seafood Processing Facilities General Information
Discharging to Marine / Estuarine [b] Waters

Previous NPDES Authorization Number (Link to NOI)	Facility Name [a]	Receiving Water (Link to Map)	Depth of Discharge (Feet MLLW)	Mixing Zone Size (Radius in Feet)	Project Area ZOD [c] (Yes/No)	Located in Excluded Area Waterbody (Table D3)
New	Golden Harvest Alaska Seafood LLC Adak Processing Facility	Sweeper Cove	-60	100	Yes	Yes
New	Haines Packing Company	Letnikof Cove	-60	100	Yes	No
AKG520518	Homer Port Fish Grinding Facility	Kachemak Bay	-32	100	Yes	Yes
New	Hydaburg Specialty Seafood Processing Plant	Sukkwan Strait	-40	100	Yes	No
AKG520533	Icicle Seafoods PMC Northern Victor	Iliuliuk Bay	-89	100	Yes	Yes
AKG520073	Keku Seafoods LLC Kake Plant	Keku Strait	-102	100	Yes	No
AKG520467	Leader Creek Fisheries Naknek Plant (Estuarine)	Naknek River	-8	100	Yes	No
AKG520112	North Pacific Seafoods Pederson Point Plant	Kvichak Bay	-0.5	100	Yes	No
AKG520039	North Pacific Seafoods Red Salmon Naknek Plant (Estuarine)	Naknek River	-1.7	100	Yes	No
AKG520065	North Pacific Seafoods Sitka Plant (Major)	Sitka Harbor Channel (Sitka Sound)	-38	100	Yes	No
AKG520055	North Pacific Seafoods Togiak Plant (Estuarine)	Togiak River	-4	100	Yes	Yes
AKG520036	OBI Seafoods, LLC Alitak Plant	Lazy Bay	-45	100	Yes	Yes

Table D1 Seafood Processing Facilities General Information
Discharging to Marine / Estuarine [b] Waters

Previous NPDES Authorization Number (Link to NOI)	Facility Name [a]	Receiving Water (Link to Map)	Depth of Discharge (Feet MLLW)	Mixing Zone Size (Radius in Feet)	Project Area ZOD [c] (Yes/No)	Located in Excluded Area Waterbody (Table D3)
AKG520494	OBI Seafoods, LLC Cordova Plant (Major)	Orca Inlet	-29	100	Yes	No
AKG520048	OBI Seafoods, LLC Egegik Plant (Estuarine)	Egegik River	-15	100	Yes	No
AKG520059	OBI Seafoods, LLC Excursion Inlet Plant	Excursion Inlet	-58	100	Yes	Yes
AKG520047	OBI Seafoods, LLC Larsen Bay Plant	Larsen Bay	-30	100	Yes	Yes
AKG520092	OBI Seafoods, LLC Naknek Plant (Estuarine)	Naknek River	-25	100	Yes	No
AKG520303	OBI Seafoods, LLC Petersburg Plant (Major)	Wrangell Narrows	-24	100	Yes	Yes
AKG520488	OBI Seafoods, LLC Seward Plant (Major)	Resurrection Bay	-126	100	Yes	No
New	OBI Seafoods, LLC Wood River Plant (Estuarine)	Wood River	-9	100	Yes	Yes
AKG520477	Ocean Beauty Seafoods Petersburg Plant (Major)	Wrangell Narrows	-30	100	Yes	Yes
AKG520481	Pacific Star Seafoods Kenai Plant (Estuarine)	Kenai River	-12	100	Yes	No
AKG520525	Pacific Sun Products Ketchikan Plant	Tongass Narrows	-45	100	Yes	No
AKG520012	Peter Pan Seafoods Dillingham Plant (Estuarine)	Nushagak River	-10	100	Yes	No

Table D1 Seafood Processing Facilities General Information
Discharging to Marine / Estuarine [b] Waters

Previous NPDES Authorization Number (Link to NOI)	Facility Name [a]	Receiving Water (Link to Map)	Depth of Discharge (Feet MLLW)	Mixing Zone Size (Radius in Feet)	Project Area ZOD [c] (Yes/No)	Located in Excluded Area Waterbody (Table D3)
AKG520014	Peter Pan Seafoods Port Moller Plant	Port Moller Bight	-10	100	Yes	Yes
AKG520244	Peter Pan Seafoods Valdez Plant (Major)	Port of Valdez	-135	100	Yes	No
AKG520474	Polar Seafoods Seward Plant (Major)	Resurrection Bay	-85	100	Yes	No
AKG520355	Resurrection Bay Seafoods Seward Plant	Resurrection Bay	-95	100	Yes	No
AKG520412	SASSCo Taku Fisheries and Smokeries Juneau Plant	Gastineau Channel	-70	100	Yes	No
New	Sea Level Seafoods Wrangell Plant	Zimovia Strait	-79	100	Yes	No
AKG520101	Seafood Producers Cooperative Sitka Seafood Plant (Major)	Sitka Harbor Channel	-16	100	Yes	No
New	Silver Bay Seafoods Craig Plant	Klawock Inlet	-79	100	Yes	No
New	Silver Bay Seafoods False Pass Plant	Isanotski Strait	-84	100	Yes	Yes
New	Silver Bay Seafoods Naknek Plant (Estuarine)	Naknek River	-30	100	Yes	No
AKG520547	Silver Bay Seafoods Sawmill Cove Industrial Park Plant	Silver Bay	-210	100	Yes	Yes
AKG520042	Silver Bay Seafoods Valdez Plant (Major)	Port of Valdez	-122	100	Yes	No

Table D1 Seafood Processing Facilities General Information
Discharging to Marine / Estuarine [b] Waters

Previous NPDES Authorization Number (Link to NOI)	Facility Name [a]	Receiving Water (Link to Map)	Depth of Discharge (Feet MLLW)	Mixing Zone Size (Radius in Feet)	Project Area ZOD [c] (Yes/No)	Located in Excluded Area Waterbody (Table D3)
New	Sixty Degrees North Seafoods LLC	Orca Inlet	-22	100	Yes	No
New	Tonka Seafoods Inc Petersburg Plant	Wrangell Narrows	-32	100	Yes	No
AKG520053	Trident Seafoods Chignik Production Plant	Anchorage Bay	-60	100	Yes	Yes
AKG520103	Trident Seafoods Chignik Support Plant	Anchorage Bay	-48	100	Yes	Yes
AKG520493	Trident Seafoods Cordova North Plant (Major)	Orca Inlet	-18	100	Yes	No
AKG520491	Trident Seafoods Cordova South Plant (Major)	Orca Inlet	-19	100	Yes	No
AKG520506	Trident Seafoods dba False Pass Seafoods LLC	Isanotski Strait	-75	100	Yes	Yes
AKG520002	Trident Seafoods Ketchikan Cannery Plant (Major)	Tongass Narrows	-90	100	Yes	No
AKG520003	Trident Seafoods Naknek North Plant (Estuarine)	Naknek River	-32	100	Yes	No
AKG520476	Trident Seafoods Petersburg Plant (Major)	Wrangell Narrows	-22	100	Yes	Yes
AKG520058	Trident Seafoods Wrangell Plant	Wrangell Harbor	-72	100	Yes	Yes
AKG520160	Whittier Seafood Whittier Plant	Passage Canal	-86	100	Yes	No

Table D1 Seafood Processing Facilities General Information
Discharging to Marine / Estuarine [b] Waters

Previous NPDES Authorization Number (Link to NOI)	Facility Name [a]	Receiving Water (Link to Map)	Depth of Discharge (Feet MLLW)	Mixing Zone Size (Radius in Feet)	Project Area ZOD [c] (Yes/No)	Located in Excluded Area Waterbody (Table D3)
AKG520070	Yakutat Seafoods Yakutat Plant	Monti Bay	-42	100	Yes	No

Notes:

a. The facilities listed may be authorized with the submittal of a complete NOI, if meeting the permit conditions.
b. Tidally influenced/ Estuarine Waters
c. Project Area ZOD and instructions on finding a facility can be found on DEC Seafood Permitting website.

Table D2 Seafood Processing Facility Information
Discharging to Fresh Waters

Previous NPDES Authorization Number	Facility Name	Receiving Water Body	Depth of Discharge (Feet MLLW)	Mixing Zone	Zone of Deposit?	Located in Excluded Area Waterbody (See Table D3)
AKG520229	Boreal Fisheries Saint Marys Plant	Yukon River	-30	Yes	No	Yes
AKG520174	Kwikpak Fisheries Emmonak Plant – New EDA Building	Kwiguk Pass	-25	Yes	No	Yes
AKG520531	Norton Sound Economic Development Nome Plant	Snake River	-12	Yes	No	No
AKG520508	Norton Sound Seafood Unalakleet Plant	Unalakleet River	-4.25	Yes	No	Yes

Table D3: Facilities Currently Located in Excluded Area Water Bodies

Facility Name	Receiving Water Body (Click to view map)	**Located in Excluded Areas or within 1 nm of excluded areas, including:** State Game Refuge (SGR), State Game Sanctuary (SGS), State Critical Habitat (SCHA); National Parks (NP), National Preserve (Np), National Monuments, National Wilderness Areas (NWA), National Wildlife Refuges (NWR); or Critical Habitat or Nesting Area (CHA) **Water Quality Limited Areas:** (including Category 5/Category 4b/ CWA Section 303d)
Alaska Glacier Seafoods Juneau Plant	Auke Bay	Mendenhall State Game Refuge
Atka Pride Seafoods Atka Plant	Nazan Bay	Alaska Maritime NWR Alaska SW DPS Sea Otter CHA
Boreal Fisheries St. Mary's Plant	Yukon River	Yukon Delta Alaska Maritime NWR
Copper River Seafoods Togiak Plant	Togiak Bay	Togiak Alaska Maritime NWR
E&E Foods Inc dba Coffee Point Seafoods Egegik Large Plant	Egegik Bay	Steller's Eider Concentration Areas: Egegik Bay
Golden Harvest Alaska Seafood LLC Adak Processing Facility	Sweeper Cove	Alaska Maritime NWR (Aleutian Islands Unit) Alaska SW DPS Sea Otter CHA
Homer Port Fish Grinding Facility	Kachemak Bay	Kachemak Bay CHA Steller's Eider Concentration Areas : Homer Spit
Icicle Seafoods Larsen Bay Plant	Larsen Bay	Alaska SW DPS Sea Otter CHA, Alaska NWR Kodiak
Icicle Seafoods Petersburg Plant	Wrangell Narrows	Tongass NF Wilderness Area
Icicle Seafoods PMC Northern Victor	Iliuliuk Bay	Steller's Eider Concentration Areas: Unalaska Alaska Maritime NWR Southwest Alaska Sea Otter Critical Habitat
Icicle Seafoods Wood River Plant	Wood River	Alaska Maritime NWR 3.3nm
Kwikpak Fisheries Emmonak Plant	Kwiguk Pass	Yukon Delta Alaska Maritime NWR
North Pacific Seafoods Togiak Plant	Togiak River	Togiak Alaska Maritime NWR
Norton Sound Seafood Unalakleet Plant	Unalakleet River	Spectacled Eider Critical Habitat- Norton Sound
Ocean Beauty Seafoods Alitak Plant	Lazy Bay	Kodiak Alaska Maritime NWR, Alaska SW DPS Sea Otter CHA
Ocean Beauty Seafoods Excursion Inlet Plant	Excursion Inlet	Glacier Bay NP and Preserve

Table D3: Facilities Currently Located in Excluded Area Water Bodies		
Facility Name	**Receiving Water Body (Click to view map)**	**Located in Excluded Areas or within 1 nm of excluded areas, including:** State Game Refuge (SGR), State Game Sanctuary (SGS), State Critical Habitat (SCHA); National Parks (NP), National Preserve (Np), National Monuments, National Wilderness Areas (NWA), National Wildlife Refuges (NWR); or Critical Habitat or Nesting Area (CHA) **Water Quality Limited Areas:** (including Category 5/Category 4b/ CWA Section 303d)
Ocean Beauty Seafoods Petersburg Plant	Wrangell Narrows	Tongass NF Wilderness Area
Peter Pan Seafoods Port Moller Plant	Port Moller Bight	Stellar Eider CHA: Nelson Lagoon, Alaska SW DPS Sea Otter CHA, Alaska Maritime NWR
Silver Bay Seafoods False Pass Plant	Isanotski Strait	Unimak Island Unit of Alaska Maritime NWR; Pavlof Unit of Alaska Peninsula National Wildlife Refuge
Silver Bay Seafoods Sawmill Cove Industrial Park Plant	Silver Bay	Sawmill Cove – Area of concern and Herring Cove –TMDL water body
Trident Seafoods Chignik Production	Anchorage Bay	Steller's Eider Concentration Areas: Chignik Bay, Alaska Maritime NWR, Alaska SW DPS Sea Otter Critical Habitat
Trident Seafoods Chignik Support Plant	Anchorage Bay	Steller's Eider Concentration Areas: Chignik Bay, Alaska Maritime NWR, Alaska SW DPS Sea Otter Critical Habitat
Trident Seafoods dba False Pass Seafoods LLC	Isanotski Strait	Unimak Island Unit of Alaska Maritime NWR, Pavlof Unit of Alaska Peninsula National Wildlife Refuge
Trident Seafoods Petersburg Plant	Wrangell Narrows	Petersburg Creek-Duncan Salt Chuck Wilderness, Tongass NF Wilderness Area
Trident Seafoods Wrangell Plant	Wrangell Harbor	Petroglyph State Historical Site, Tongass NF Wilderness Area

Appendix E

Seafloor Survey and Outfall Inspection Protocol

SEAFLOOR SURVEY PROTOCOL OVERVIEW

Seafloor Survey Applicability. The Seafloor Survey Protocol shall be used by the permittee to demonstrate compliance within the project area Zone of Deposit (ZOD) permit conditions. Seafloor surveying must be performed within one year of obtaining permit coverage and subsequently as required in Permit Table 7.

Purpose. The purpose of a seafloor survey is to 1) determine compliance with marine water quality criteria for residues (seafood processing waste deposits) on the seafloor; 2) evaluate the potential impacts on aquatic life, including the potential for bioaccumulation and persistence; 3) evaluate the expected duration of the deposit and any adverse effects; and 4) evaluate the potential transport of pollutants by biological, physical, and chemical processes. The permittee's historic and current discharge location(s) may have accumulated or be currently accumulating seafood waste deposits. Thus, the seafloor surrounding the current and all previous outfall terminus locations must be evaluated. The permit limits the allowed deposit of substances (seafood waste residues) to 1.0 acre, as allowed by 18 AAC 70.210(a). Thus, the seafloor survey of the project area ZOD is required to fulfill 18 AAC 73.210(c).

Seafloor Survey Protocol. The Seafloor Survey Protocol must be reviewed by the permittee and the permittee's surveyor. An equivalent method may be acceptable if it meets the survey purpose, as well as the data gathering and reporting objectives, contained herein. The Protocol method is set up as a two part process. Alternate survey methods selected must be approved by DEC prior to implementation.

Part I: Seafloor Survey will determine the general location(s) and initial areal extent of seafood waste seafloor deposits. The Seafloor Survey results, information gathered, and observed seafood waste deposit location(s) shall be used to inform the Part II - Seafloor Survey. The permittee may choose to perform a more discrete seafloor survey (closer grid spacing, varied methods) to gather data as required in order to provide greater precision in defining the size and type of seafood waste deposits.

Adjusting the size of the Project Area ZOD: The Part I – Seafloor Survey results may be used by a permittee to propose a modification to the authorized project area ZOD, if a seafloor survey demonstrates that the authorized project area ZOD size should be modified and/or relocated to more accurately capture the facility's seafood waste deposits.

Part II: Seafloor Survey, and any subsequent surveys as required by the seafloor monitoring schedule, shall be derived from the Part I – Seafloor Survey results and shall refine the location(s), type, thickness, and mapping of seafood waste deposits. Continued surveying will document existing and ongoing seafood waste deposition, as well as natural ambient dispersion and biological decay processes.

Part I –Seafloor Survey Protocol

Survey Method: The permittee shall complete a seafloor survey (primarily an observation and photographic survey) of the entire project area Zone of Deposit (ZOD).

The permittee shall provide the surveyor a copy of the permit, any identified location(s) of seafood waste deposits as documented through the previously conducted Seafloor Survey(s), and this Seafloor Survey Protocol. A permittee may use either a diver as a surveyor, a remotely operated vehicle (ROV) with high definition photographic capability (with still-image capture capability), or a high definition underwater video camera (with still-image capture capability) towed behind a vessel to obtain the required photographs.

The survey shall be completed on a 30 foot by 30 foot grid pattern (30 feet between transect lines and 30 feet between sample plots along each transect). A minimum of nine sample plots must be surveyed. The sample plots must be centered around the outfall and must be adequate to encompass all seafood processing waste coverage areas. The survey must continue beyond the boundaries of seafood processing waste found as "Trace' so that all deposits can be mapped as continuous, discontinuous, or "Trace" coverage. The permittee may choose to perform a more discrete seafloor survey (closer grid spacing, varied methods) to gather data as required in order to provide greater precision in defining the size and type of seafood waste deposits.

The permittee is required to collect continuous Wide Area Augmentation System (WAAS) enhanced Global Positioning System (GPS) location information (reported in decimal degrees to the fifth decimal place, if available, using the North American Datum (NAD) 1983 or World Geodetic System (WGS) 1984 datum). The accuracy of coordinates shall be at least within ±50 feet (17 meters) while conducting the survey so that any vessel drift can be mapped and used comparatively in the Part II – Seafloor Survey. The permittee is also required to collect continuous depth information for each sample plot location, corrected to Mean Lower Low Water (MLLW).

Photographs are required on the designated grid spacing and, along with sample plot results, will establish the general locations of the seafood deposits, and may be used for future adjustments to the initial project area ZOD. If seafood processing waste is visible farther than the initially mapped project area ZOD, the photographic survey shall continue beyond the initially mapped project area ZOD until seafood processing waste is no longer visible. Current technologies exist that allow the Part I - Seafloor Survey to extend into water depths greater than -120 feet MLLW.

Skipping the Part I –Seafloor Survey: As found above in the 'Seafloor Survey Protocol Overview', the size and location of a project area ZOD may be adjusted based on the findings of a seafloor survey (be made smaller, larger or change in shape). The permittee may request a change to the project area ZOD by submitting a letter to the Department with a copy of the Part I survey. The Department's subsequent approval of the reduction in project area ZOD size could lead to less dive time during the Part II seafloor survey protocol. On the other hand, the permittee may find that performing the Part I survey and having to hire the company to come back out to the site to perform the Part II survey the following year may be an added expense. Therefore, the Protocol allows the permittee to elect to skip the Part I – Seafloor Survey if the permittee wishes to perform a complete Part II – Seafloor Survey of the entire project area ZOD during the second year of permit coverage. If choosing to skip the Part I – Seafloor Survey, the permittee must submit a letter to the Department within 180 days of permit coverage, indicating the intent to skip the Part I – Seafloor Survey and indicating the permittee plans on conducting the Part II - Seafloor Survey of the entire project area ZOD during the second year of permit coverage.

Part I – Seafloor Survey Protocol (Continued)

Part I - Seafloor Survey Report. The permittee shall submit a Part I - Seafloor Survey Report to DEC containing the following information (due with the survey year's Annual Report):

1) **Facility Information**
   a) Permittee Name, APDES permit number, address, and contact information.
   b) Type of seafood processing facility, waste treatment, product, and by-product production.
2) **Surveyor and Survey Information**
   a) Surveyor's name, signature, and contact information.
   b) Brief background of surveyor's previous work history performing seafloor surveys and mapping.
   c) Date and time the survey was completed.
   d) Name and USCG number of vessel assisting in the survey.
   e) Name of the receiving water where the survey was completed.
   f) Continuous GPS location information (as described in the survey method).
   g) Whether there are other seafood waste discharges occurring within 0.25 miles of the permittee's discharge location(s).
   h) Whether seafood waste discharge was occurring at the time of the survey.
   i) QAPP that describes the method used to:
      i) Establish linear transects,
      ii) Locate sample plot locations along the transects,
      iii) Estimate percent coverage at each sample plot (photograph location), and
      iv) Calculate the continuous and discontinuous coverage area(s) of seafood waste deposits.
3) **Previous Survey Information (if applicable)**
   a) Name of surveyor(s) who completed the previous survey(s).
   b) Name of receiving water.
   c) Date, time, and place of previous seafloor survey(s).
   d) Date of completion of the previous report and first and last name(s) of individual(s) who performed the analysis and report writing.
   e) A narrative of the seafloor survey(s) results that describes the methods and results of previous survey(s), including:
      i) Total cumulative area(s) of seafood waste deposits
      ii) Any available electronic or hard copy mapping of seafood waste deposits found
   f) Annual discharge load (pounds) at time of previous survey
   g) Whether mechanical raking or other pile reduction strategies have been implemented by the permittee at any time.
4) **Sample Plot Observations.** The seafloor survey shall be completed on a 30 foot by 30 foot grid pattern (30 feet between transect lines and 30 feet between sample plots (photographic image locations)) along each transect for the entire seafloor survey area. If the outfall is found to be broken or floating, the seafloor survey must encompass the authorized outfall location as well as the areas below the discharge location(s) where the break/floating outfall was found. The Seafloor Survey is required to occur into water depths greater than -120 feet MLLW until seafood

processing waste is no longer visible. At each sample plot, the surveyor shall use a three-foot by three-foot square to determine required items in the Seafloor Survey Report, which include the following:

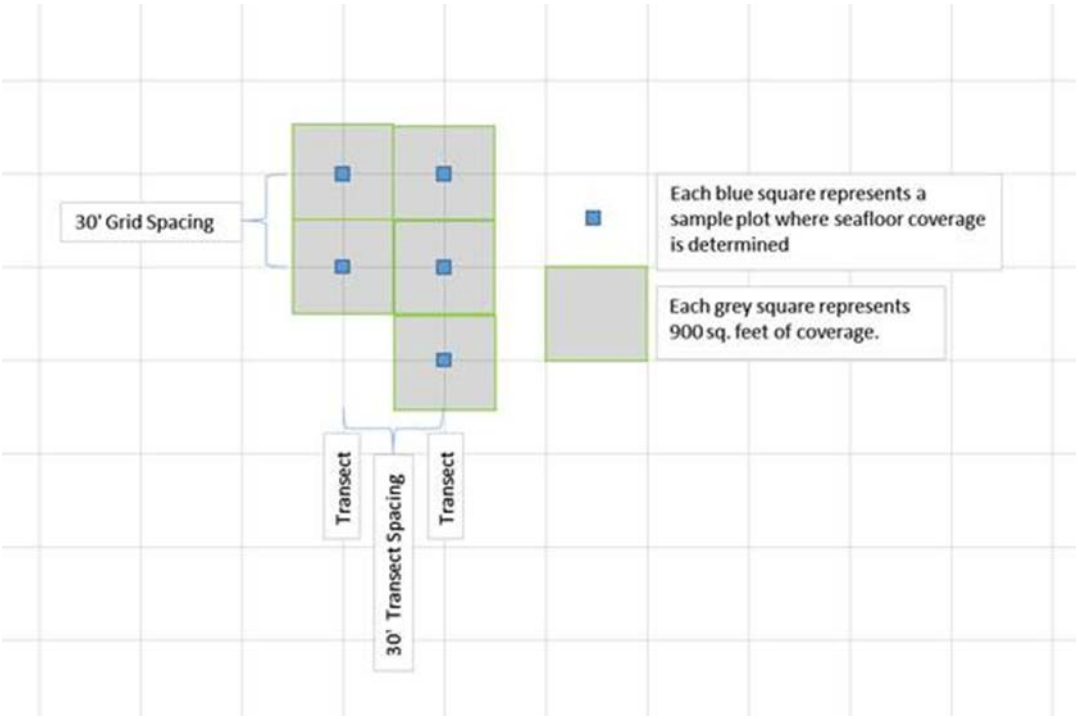
a) **Digital photographs.** Digital photographs representative of the sample plots must depict the nature and coverage of seafood processing waste deposit(s), if any, on the seafloor along parallel transects. Digital photographs shall capture images of natural sediment, natural sediment covering seafood processing waste, if observable, continuous and percentages of discontinuous seafood waste, and/or bacterial mats covering sediment. The surveyor must document whether they are able to differentiate between natural sediments or evidence of seafood waste residues based on observations and photographs. Photographs shall be of sufficient definition, clarity, and detail to clearly document the seafloor conditions and observations[1]. Photographs shall include a digital date and time stamp. The photograph log shall include the name of the seafood processor, survey date, and photographic sample plot location identifier.

b) **Deposit Type.** Type of seafood waste deposits observed (e.g., bones, whole heads, fins & tails, ground seafood waste including average size (1.0-inch, 0.5 –inch), fine screened seafood waste particles (residues), natural sediments (sediment sloughs, tidal sands), and/or sediments covering seafood waste.

   i. **Amount and Type of Seafood Waste Coverage.** The surveyor must estimate and record the percentage (Detectable to 100%, rounding to the nearest 10%) of seafloor area(s) covered by recent seafood processing deposits and any historic deposits (decaying bones, Beggiatoa mats, etc.) at each sample plot location (see Permit Attachment D – Transect Data Form). The observation at the sample plot must also include a description of the types of observed seafood waste deposits (e.g., ground seafood waste particles meeting permit requirements, processed crab or bivalve shell waste including average size (1.0-inch, 0.5-inch), whole heads, fins & tails, etc.).

   ii. Each three-foot by three-foot (3 ft by 3 ft) ‘sample plot’ centered every 30 feet along a transect represents 900 square feet (ft^2) of seafloor.

[1] Seafloor surveyors may be unable to differentiate between natural sediments and fine particle size seafood processing waste. If this is the case, during the Seafloor Survey the surveyor will be required to obtain sediment grab samples and determine organic enrichment.



iii. The seafloor survey shall report each 3 ft by 3 ft sample plot's seafood waste coverage to the nearest 10%, as follows:

(1) **Trace- Report**

Discharge Type	Result	Report
Ground waste	Detectable[2] - 9% (0.5 inch or greater thickness)	Trace
Ground waste	Any % coverage with entire sample plot less than 0.5 inch seafood waste deposit thickness	Trace
Screened waste	Detectable - 9% (no thickness threshold)	Trace

(2) **Discontinuous Coverage**- For a permittee discharging ground waste, the surveyor shall use a seafood waste deposition threshold which is one-half inch or thicker as the minimum detection level. For a permittee discharging screened waste, no minimum detection level applies to the seafood waste deposit thickness. All 'Discontinuous' coverage will be calculated and reported as follows:

[2] Detectable seafood waste has typically been reported to be 2% coverage.

Discontinuous Coverage (not applicable to 1-acre limit)

Result	Report
10-14%	10%
15-24%	20%
25-34%	30%
35-49%	40%

Discontinuous Coverage (applicable to 1-acre limit)

Result	Report
50-54%	50%
55-64%	60%
65-74%	70%
75-84%	80%
85-94%	90%

Calculate the areal extent of the discontinuous coverage of seafood processing waste deposits with 11 – 49% coverage and 50 – 94%, as a percentage of 900 sq. feet.

Discontinuous Coverage (not applicable to 1-acre limit) Example Calculations:

- Discontinuous Areas "A" – Six sample plots reported as 40% coverage

$$6 * 900\ ft^2 * 0.4 = 2{,}160\ ft^2$$

- Discontinuous Areas "B" – Twelve sample plots reported as 30% coverage

$$12 * 900ft^2 * 0.3 = 3{,}240\ ft^2$$

Total 10-49% discontinuous coverage: 2,160 + 3,240 =	**5400 ft^2**
Report Acres: 5,400/43,560 =	**0.12 acres**

Greater than 50% Discontinuous Coverage Areas (applicable to 1-acre limit) Example Calculations:

- Discontinuous Areas "C" – Six sample plots reported as 60% coverage

$$6 * 900\ ft^2 * 0.6 = 3{,}240\ ft^2$$

- Discontinuous Areas "D" – Eighteen sample plots reported as 80% coverage

$$18 * 900ft^2 * 0.8 = 12{,}960ft^2$$

- Discontinuous Areas "E" – Seven sample plots reported as 90% coverage

$$7 * 900ft^2 * 0.9 = 5{,}670ft^2$$

Total 50-94% discontinuous coverage = 3,240 + 12,960 + 5,670=	**21,870 ft^2**
Report Acres: 21,870/43,560 =	**0.50 acres**

(3) **Continuous Coverage** (applicable to 1-acre limit) – Transect Squares with 95% - 100% coverage will be considered Continuous Coverage. For a permittee discharging ground waste, the surveyor shall use a seafood waste deposition threshold which is one-half inch or thicker as the minimum detection level. For a permittee discharging screened waste, no minimum detection level applies to the seafood waste deposit thickness. All continuous coverage will be calculated and reported as follows:

Continuous Coverage (applicable to 1-acre limit)

Result	Report
95-100%	100%

Continuous Coverage Areas Counting toward 1-acre limit Example Calculations:

- 15 transect squares times 900 ft^2 each (15 * 900) = **13,500 ft^2** of continuous coverage
- **Report Acres:** 13,500/43.560 = **0.31 acres**

Total Coverage Areas Applicable toward 1-acre limit

Total 50-94% discontinuous coverage	21,870 ft^2
Total 95-100% continuous coverage area	13,500 ft^2
Total square feet counting toward 1-acre limit 21,870 + 13,500 =	35,370 ft^2
Total Acres: 35,370/43,560	**0.81 acres**

c) **Beggiatoa or other types of Bacterial Mats**. Document the absence or presence, as well as size and location, of Beggiatoa or other microbial mats observed on or near any seafood waste deposits or on the seafloor (if waste deposits are not evident). All Beggiatoa or other bacterial mat areas shall be counted as continuous coverage.

d) **Sea Flora and Fauna.** Type and number of macro sea fauna (sea life) and type of aquatic vegetation observed on the seafloor during the photographic survey. Types and quantities of sea life observed adjacent to, on, or feeding on any seafood processing waste deposits during videotaping, along with representative photos, with time and date stamp. The surveyor shall mention any indication of change in sea life behavior from any previous observation or seafloor survey reports, and any other observations relevant to the condition of the benthic community or seafloor.

e) **Hydrology.** Report ambient tidal current velocity and direction, and water chemistry (both seasonal and in-situ on the day of the survey, including salinity, water temperature, density, turbidity, DO, and pH). These parameters should be taken as a grab sample or using a probe.

f) **Substrate.** Composition of substrate (soft sediments, cobble, gravels, solid rock and/or glacial silts, or ground/screened seafood waste, etc.). If previous benthic assessments, dive surveys, or remediation actions have documented the presence of buried seafood waste, this waste must be

included in continuous coverage calculations if those buried areas are located directly adjacent to outfalls discharging seafood processing waste and wastewaters, or to other continuous coverage areas surveyed. The surveyor has the option to obtain new core samples to document whether seafood waste is or is not present at the previously identified locations.

g) **Water depth.** (adjusted to MLLW, reported in feet) must be reported at the seafloor and at the top of any waste pile observed.

h) **Plume Size.** An indication of an active or inactive discharge occurring during the time(s) of the survey.

i. Approximate width and length of each outfall's effluent plume when discharge is occurring.

ii. Evidence and photographs documenting floating residues surrounding or extending outside the visible plume.

iii. Observations and photographs of waste residue particle size in any deposit within 30 ft of the outfall, and a minimum observation and one photograph of the particle size (if any) with an accompanying measuring device.

i) **Water Clarity.** A description of water clarity, and changes in water clarity as a result of the discharge, if occurring.

j) **Tides.** Ambient tidal current velocity and direction.

5) **Sample Plot Observations Map.** A map or representative drawing (with an identified scale, including a north arrow) shall be developed that depicts the facility and the seafloor area surveyed, including the 30 foot by 30 foot transect grid. Each photographic sample plot location must be identified on the map and correlated[3] to the information required in 4.a-i (above). The total cumulative area(s) of both the continuous and discontinuous coverage shall be reported in square feet and in acres to the nearest tenth of an acre. The map must include:

a) The locations of any seafood processing waste deposits, including the outer boundaries of any continuous and/or discontinuous coverage areas, in relation to the discharge location(s), mapped seafloor area boundaries, survey grid, and outfalls, including:

i. **Continuous Coverage**: The relative location and estimated size (ft^2 and acre) of any continuous coverage areas (95% - 100% coverage) of seafood waste.

ii. **Discontinuous Coverage:** The relative location and estimated size (ft^2 and acre) of any discontinuous coverage areas (10% - 94% coverage) of seafood waste.

iii. **Trace Coverage:** The relative location and estimated size (ft^2 and acre) of any trace coverage areas (less than 10% coverage, or floating seafood residues) of seafood waste.

iv. **Beggiatoa (or other) Mats:** The relative location and estimated size (ft^2 and acre) of any Beggiatoa or other bacterial mats discovered during the photographic survey.

v. **Outfalls and Water Intakes:** Coordinates of beginning and end points for all outfalls/intakes (including pipes that do not belong to the permittee, and the permittee's inoperative pipes), description and condition of the outfall(s) (Outfall System Inspection

[3] Correlating data - Portions of the information required by #4 may be identified by numbers or letters on the map. The numbers are then used to correspond to the data gathered for each sample plot location and presented in a table format or Excel spreadsheet.

Protocol) (corrosion, condition of cathodic protection for metal outfalls, bends, or breaks), depth of outfall(s) at MLLW, and outfall diffuser description(s), if any.

vi. **Permanent Markers (if any):** The location of surface or subsurface permanent survey marker monuments, if any.

6) **Change Sheet**. A change sheet at the end of the seafloor survey report attached by the permittee, documenting any changes to the seafloor survey report as required by the permittee. Or, the two documents may be submitted in red-line track changes. Seafloor Survey Reports shall be signed by both the surveyor and by a principal officer or duly authorized representative of the permittee, documenting review of any changes to the surveyor's original seafloor survey report.

7) Explanation of Information Not Reported. If select information required was not obtained, the Seafloor Survey Report must include an explanation as to why the information could not be obtained and submit alternate methods as to how the data should be obtained.

If seafloor surveys or other available evidence submitted by the operator are not sufficient to determine the amount of seafood processing waste deposit coverage, DEC will, in is discretion, require the operator to conduct additional surveys or other monitoring for that purpose.

8) **Electronic File Submittal Requirements.** A copy of the Seafloor Survey must be submitted in Adobe Acrobat or Microsoft Word to DEC with the survey year's Annual Report. If GIS files are developed, shape files with supporting metadata shall also be submitted to DEC.

9) **Remediation Plan.** A remediation plan is required if a permittee's seafloor survey report documents seafood processing waste coverage(s) exceeding one acre, regardless of when the waste was deposited. The permittee must submit a proposed remediation plan to comply with all permit conditions to DEC for review and approval within 120 days of discovery of such conditions, unless additional time is granted by DEC.

Part II - Seafloor Survey Protocol

Seafloor Survey Method: The Part II – Seafloor Survey area will be based on the initially identified location(s) of the seafood processing waste deposit coverage areas reported in the Part I - Seafloor Survey Report. Results of the Part I Report will be used to establish the initial transects for the Part II Seafloor Survey. If observations from the Part I – Report did not reveal any evidence of seafood processing waste deposits, then the Part II - Seafloor Survey will minimally encompass a 200 foot by 200 foot area surrounding the outfall terminus.

The permittee shall provide the surveyor completing the Part II - Seafloor Survey a copy of the permit, the discharge locations, the Part I - Seafloor Survey Report, and all other pertinent data collected (i.e., previous benthic assessments, seafloor surveys, Army Corp of Engineer's required seafloor surveys, etc.). The surveyor should request from the permittee information on any maintenance completed that could affect seafloor deposits. Additionally, the permittee shall inform the surveyor of any change in discharge locations since the Part I - Seafloor Survey, or last Part II - Seafloor Survey, was completed.

The Part II - Seafloor Survey shall use the 30 foot parallel transect system, with 30 foot sample plot locations along each transect for the discharge location, and report the information as found in the Part II - Seafloor Survey Report requirements (below). The number of transects must be adequate to encompass all seafood processing waste coverage areas found in the Part I - Seafloor Survey and extend to all areas of seafood processing waste found by the surveyor while performing the Part II – Seafloor Survey.

If feasible, at least five permanent markers (e.g., large rock outcrops, boulders, etc.) must be established at suitable locations, provided there are sufficient land/facility and/or underwater locations. If markers/monuments are not established, the Part II – Seafloor Survey Report shall report why markers were not established (e.g., current technologies were used that would allow the seafloor surveys to be repeated without permanent markers, or permittee does not own the bedlands the survey was performed at). If unable to establish permanent markers, the surveyor must document in the seafloor survey report the methods used to establish repeatable transects. GPS coordinates derived using WAAS technologies, or another technology with equivalent or better position accuracy, must be recorded for each underwater marker.

The surveyor must establish transect lines with a surveyor's tape or other precise methodology. Parallel transects shall be established no more than 30 feet apart and extend in a perpendicular direction from the permanent markers. If seafood processing waste deposit coverage extends beyond where neighboring seafood facilities' piles may intersect, then transect lengths must be extended to identify the full extent of seafood processing waste deposits.

At each sample plot, the surveyor shall use a three-foot square to determine required items in the Seafloor Survey Report.

Part II -Seafloor Survey Report Requirements –The permittee shall submit the Part II - Seafloor Survey Report to DEC containing the following information (due with the survey year's Annual Report).

The Part II – Seafloor Survey Report must gather and report the same data parameters as found in the Part I – Seafloor Survey listed above, including:

1) Facility Information
2) Surveyor and Survey Information
3) Previous Survey Information
4) Sample Plot Observations –Data as required in Part I- 4.a – 4.j.

   Additional Part II Sample Plot Observation Requirements. At each sample **plot the surveyor must also collect the following data:**

   k) Seafood Waste Deposit Thickness. Determine and record estimated seafood processing waste deposit thickness (from the seafloor to the highest point of the pile) using a marked stick or pipe to the nearest 0.5-inch (1/2") at each sample plot. If seafood waste is visible, but less than ½" thick, record as "Trace". Coring may be required to determine the actual thickness of seafood processing waste deposits measured greater than three feet deep or if deposits are of such a fine particle size that the surveyor is unsure whether the seafloor substance is seafood waste or natural sediment.

   l) Report of Anoxic Conditions. Anoxic conditions often form in the seafood processing waste deposits as the material decomposes. The surveyor should identify and document whether gas is being released from undisturbed seafood processing waste deposits or is released when measuring seafood waste pile thickness.

   m) Dissolved Oxygen and other Gases. When gas is observed escaping from the seafloor in the vicinity of the outfall or from the seafood waste pile, the surveyor is required to collect water samples or measure directly for dissolved oxygen, methane, and hydrogen sulfide. Samples shall be collected at six inches or less above the seafloor/seafood waste deposit where the greatest amounts of gas release are observed.
5) Sample Plot Observations Map
6) Change Sheet
7) Explanation of Information Not Reported
8) Electronic File Submittal
9) Remediation Plan

Table 1: Definitions

Continuous coverage	Seafood waste deposits that are found to be 95% or greater areal coverage within a 3-foot by 3-foot sample plot as measured along a transect of the seafloor. For a permittee discharging ground waste, the surveyor shall use a seafood waste deposition threshold which is one-half inch or thicker on the seafloor as the minimum detection level. For a permittee discharging screened waste, no minimum detection level applies to the seafood waste deposit thickness. 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.
Discontinuous coverage	Means areas of seafood waste deposits that are estimated to cover 10% or more of the seafloor, but less than 95%, within the 3-foot by 3-foot sample plot. For a permittee discharging ground waste, the surveyor shall use a seafood waste deposition threshold which is one-half inch or thicker on the seafloor as the minimum detection level. For a permittee discharging screened waste, no minimum detection level applies to the seafood waste deposit thickness.
Project Area Zone of Deposit (ZOD)	Means the total area of the seafloor bottom and the water column within the zone of deposit in marine or estuarine waters in which DEC has authorized and limited the deposit of substances in exceedance of the WQC in 18 AAC 70.020(b) and the antidegradation requirement in 18 AAC 70.010(c). The project area ZOD includes the entire operating area of an onshore seafood processing facility, including those adjacent to the facility, including the following: seafood transfer devices; vessel and barge loading and unloading areas; offshore processing areas for supporting vessels and barges; bulkheads, ramps, floating walkways, docks, pilings, dolphins, anchors, buoys and other marine appurtenances, outfall locations and the length of the outfall line(s) connecting the facility to the point(s) of discharge; as well as previous outfall discharge locations that have no record of historical seafloor survey; and the bedland areas underlying and connecting these features.
Seafloor Survey Area	To include the entire marine floor operating area where seafood waste deposits may be found. Seafloor areas surrounding a permittee's seafood processing facility, seafloor areas surrounding: seafood transfer devices; vessel and/or barge loading and unloading areas; seafloor areas under bulkheads, ramps, floating walkways, docks, pilings, dolphins, anchors, buoys and other marine appurtenances; outfall terminus location(s) and the length of the outfall line connecting the facility to the point of discharge. Additionally, the survey shall include any seafood waste found at previous outfall terminus locations for those outfalls that have no record of historical seafloor survey; and the marine water and seafloor underlying and connecting these features.

Trace coverage	Means areas of seafood waste that are estimated to cover detectable to less than 10% areal coverage within a 3-foot by 3-foot sample plot. For a permittee discharging ground waste, the surveyor shall use a seafood waste deposition threshold which is one-half inch or thicker on the seafloor as the minimum detection level; additionally, trace deposits are also those seafood waste deposits that are less than one-half inch (½") thickness in the sample plot, no matter what the percentage of cover. For a permittee discharging screened waste, no minimum detection level applies to the seafood waste deposit thickness.
Detectable	Means any amount of observable seafood waste deposits. In general, seafloor surveyors have reported that seafood deposits must be greater than 2% coverage in the 3-foot by 3-foot sample plot to be evident.

Project Area ZOD Determination

The Department will assign the initial project area ZOD for each permittee located in marine water bodies. The entire marine operating area of an onshore or over-water seafood processing facility or community grinder shall include fish transfer areas, marine areas that encompass a facility's existing, in-use seafood discharge outfalls, as well as outfall lines no longer in use.

The project area ZOD may be refined by the permittee or the Department as the permittee performs the seafloor surveys. Figure 1 below depicts an example Project Area ZOD that may be assigned to a facility.

Figure 1: Example Project Area ZOD

Other Approved Sampling Methods. A combination of sampling methods may be used to gather the information identified in this Seafloor Survey Protocol as long as all data gathering and reporting objectives are met.

Sediment Grab Samples to Perform a Survey. A sediment grab sample is often used to supplement a dive survey, video by Remotely Operated Vehicle (ROV), or benthic analysis by sediment profile imaging. Grab sampling surveys may be performed instead of a dive survey in areas where a dive survey is not practical due to limiting ambient conditions, very low visibility, or dangerous diving conditions. Grab sampling should not be used when bottom substrate is composed of large bolder type material or bedrock. Various types of sample collection devices and techniques are available. Usually, surveyors are able to push a tube to obtain core samples of the waste pile. In other circumstances where a surveyor is not used, core samples are obtained from a bottom grab sampler, also known as a Van Veen sampler. Obtaining core samples of the top foot of the seafloor has a number of advantages. The benthic life successional stage may be determined if background samples are also obtained, including infaunal and epifaunal species, density, and level of invasive species. Additionally, the true thickness of seafood or other solids deposited on the bottom can be measured depending on the type of the bottom grab sampler. Beggiatoa bacteria may be positively identified through coring/grab sampling, if present. Subsurface grain size and type of substrate can be identified. Grab sampling must be augmented by a photographic method, such as a video seafloor survey, to document the presence or absence of macro flora and fauna, and to map the contours of the ZOD. Alternatively, the grab sampler would need attached depth and location instrumentation in order to provide a contour map of the ZOD and seafloor.

Benthic Analysis by Sediment Profile Imaging. The benthic analysis by sediment profile imaging (SPI) method has been used in areas of large seafood processing waste coverage or areas of fine material (screened seafood waste) coverage or to assess the health of the benthic community in the area of a deposit. The sediment profile camera works by burying a knife edged probe that houses a digital camera in the seafloor area being examined including into the seafood waste deposit area(s). The probe is normally fitted with water depth and location instruments to provide seafloor contour information. The probe has a Plexiglas faceplate cover to collect images of the sediment profile. An internal strobe light is mounted inside to provide illumination. The probe housing the camera descends into the sediment at a slow, controlled rate to prevent the disturbance of the sediment-water interface. After an appropriate time delay, the strobe and camera are activated to obtain a cross sectional image of the upper 20 cm of the sediment column. Depth of penetration by the probe depends on the consistency (i.e., density and hardness of the sediment, thickness) and type of seafood waste deposits and the limit of the probe width. The probe is fitted with lights, a plan view camera and a laser generated scale to allow determination of the size of objects in the picture that is taken.

This survey method provides information that meets some data objectives, including: benthic life evaluation, estimations of anoxic condition and depth of anoxic conditions, presence or absence of Beggiatoa bacteria, thickness of waste to the limit of the probe, water depth, visual appearance of the bottom, the total area of the seafood waste deposits, and estimates of continuous and discontinuous seafood waste deposit areal extent. However, the method does have its limitations. The method is only suitable for sediments that can be penetrated by the knife probe, requires vessels large enough to handle the probe, and is susceptible to currents moving the vessel. The method is not suitable for characterizing deep deposits of waste, and the costs to complete the survey are usually higher than for other survey methods.

Outfall System Inspection Protocol

Purpose: The purpose of the outfall system inspection is to verify outfall functionality, ensuring compliance with authorized discharge locations.

The permittee shall perform an operational inspection of the outfall system(s), using such techniques as pressure testing, visual, ROV, dye testing, or diver inspection during each Seafloor Survey to ensure that the outfall system is operable and functioning as designed. The permittee shall record the inspection methods and results and keep the records at the facility and available upon request. Verification of the inspection shall be included in the submittal of the inspection year's Annual Report (See Part 2.6).

The permittee shall cease discharging from a severed, failed, or leaking outfall system as soon as possible, but no more than ten days past discovery of the severance, failure, or damage, with the allowance of enough time to process seafood already offloaded to the facility. Discharging shall be discontinued if the system is unable to be repaired within ten days. Any failure of the outfall system shall be verbally reported to DEC within 24 hours of discovery, and written notification is required within five days of discovery in accordance with Appendix A, Part 3.4 (Twenty-four Hour Reporting).

Permittees shall record:

- Evidence of breaking or dragging, outfall condition and remaining life
- Evidence of leaks by use of fluorescent dye, in-line leak detector monitoring , hydrostatic testing, or pneumatic testing
- System operability
- Cathodic protection
- Log of outfall system repairs
- Photographs of breaks, leaks, damage, floating, etc.
- Pressure tests (both hydrostatic and pneumatic) must always be performed under controlled conditions, following an approved test plan, and documented in a test record. A single approved test plan could be used for several similar tests, but for each test a separate test record is required.

FLUORESCENCE DETECTORS

- Fluorescence forms the basis of one of the most widely used and effective approaches to seafloor outfall leak detection. The use of this approach requires the medium's natural ability to fluoresce or the addition of fluorescent tracers to the medium being detected. Large leak sources have often been located by visual observations from divers or cameras within the water. However, subsea fluorescence technology can provide a more effective detection system and is less restricted by depth while offering the potential to reduce the quantity of dye required. These detectors can be point sensors and have been used successfully with ROVs, and they can provide an indication of leak size from the relative signal intensity. Turbidity within the water column, however, can impede recognition of the desired medium.

Remediation Plan

A proposed remediation plan is required if the permittee's seafloor survey report documents seafood processing waste coverage exceeding one acre (43,560 square feet), regardless of when the wastes were deposited. The permittee must submit a proposed remediation plan to DEC for review and approval within 120 days of discovery of such conditions, unless additional time is requested and granted by DEC.

Remediation Planning

A remediation plan must include the following:

1. A description of historical seafood processing waste discharge practices, volumes, and current and previous dischargers (if known) at the discharge locations and any apparent relation to the existing deposition of seafood processing waste, to the extent that information is reasonably available.
2. A copy of previous survey report(s).
3. A description of the expected future processing volumes from the outfall.
4. An evaluation of the environmental impacts caused by existing seafood waste deposits and environmental impacts of methods to reduce continuous coverage.
5. An evaluation of the methods proposed to reduce continuous and discontinuous coverage, including:
    a. Alternative methods of waste disposal, possible dates of installation.
    b. Operational practices, including source control and grinder improvements, and other operational elements
6. A description of feasible methods and costs of removing seafood processing waste from the seafloor. If removal of seafood processing waste deposits is proposed, a proposed remediation plan must specify the following:
    a. The proposed areas, methods, and timing of removal, permits required to perform the removal.
    b. The volume and nature of material to be removed.
    c. The method of disposal of removed material and management practices at the disposal site to assure water quality criteria and other applicable standards are met and to assure prevention of objectionable odors.
    d. The costs of removal by the proposed method(s) and alternatives considered.
7. Identification of feasible, reasonable, and effective measures that the permittee proposes to implement to reduce existing and future continuous and discontinuous seafood processing waste deposits to less than one acre, including justification for the measures identified.
8. A performance schedule and performance measures for implementation of the plan. A proposed remediation plan can describe measures that will be implemented in phases with continued Part II - Seafloor Surveys and with future modification of the remediation plan based on progress in reducing seafood waste deposit coverage areas.

DEC Approval of Remediation Plan. DEC will approve, approve with modification, or deny the proposed remediation plan. In acting on a remediation plan, DEC will consider the total cumulative

areas of exceedance of seafood waste deposits; environmental impacts of seafood processing waste; environmental impacts of methods to reduce coverage; the feasibility, reasonableness, effectiveness, and cost of proposed and alternative measures; the timing of recovery under various alternatives; and other pertinent factors. Submittal of a remediation plan in no way removes DEC's ability to require further studies nor affects DEC's ability to seek future compliance or enforcement actions.

Appendix F

Protocol for Collecting Information on Dead Spectacled and Steller's Eiders

Appendix G

Seafood Waste Size Sampling and Analysis Protocol

Seafood Waste Size Sampling and Analysis Protocol

Purpose: The purpose of the sampling and analysis is to determine if the seafood waste is in compliance with the permit limitation that the operator must reduce the size of all solid seafood processing wastes to 0.5 inch (1.27 cm) or smaller in any dimension prior to discharge.

Method: The following is the DEC approved method for determining if seafood waste has been ground appropriately to meet the 0.5 inch (1.27 cm) grind size in the largest dimension specification. Other methods may be approved on a case-by-case basis.

Equipment List

a. Five gallon buckets (quantity two).
b. Forceps
c. Latex or Nitrile gloves
d. Two Classifier-screen sieves, 0.5 inch and 0.25 inch mesh for use with a standard five gallon bucket, search web browser for “classifier screens” or “classifier sieve”.
e. Light box

Single classifier screens in bucket

Sample Collection:

1) If the main seafood facility waste outfall pipe does not have a sample port at least 2.0 inches or greater, install an appropriately sized sample port on the underside of the main seafood outfall pipe in a convenient location for collecting discharge samples into a 5-gallon bucket. The sampling port must have a valve that opens to the full position and does not obstruct the flow.
2) Don latex or nitrile gloves. When the seafood waste treatment grinders (or other treatment) are operating and the seafood processing lines are operating at normal to near total capacity, purge the sampling port for 60 seconds into a 5-gallon bucket or buckets and re-introduce the waste into the waste conveyance system. After purging, collect a five gallon bucket full of seafood processing waste and wastewater. For easy handling, a full bucket is defined as between 1-2 inches from the top or rim.
3) Near a floor drain connected to the waste conveyance system, place two screens on top of a 5 gallon bucket (see the screen specifications in the equipment list). Place a 0.25 inch mesh screen on the bucket first and then place the 0.5 inch mesh screen on top of the 0.25 inch screen. Screens must be 1.5 inches apart to allow for the accumulation of waste passing through the upper screen.
4) Pour the full five gallons of seafood processing waste through the two screen combination. If small particles are building up in one spot, turn the bucket of seafood waste being poured onto the mesh sieves so that processing waste can pass can continue to be screened.
5) Add the contents of the top larger mesh screen (0.5 inch size screen) to the measurement collection beaker. Because seafood waste is pliable the particles tend to bias toward a smaller size as they fold and fall through the mesh. A pair of forceps may be used to help with collection (see the equipment list). Repeat as necessary.
6) Separate the 0.25 inch screen once all of the pieces have passed through the 0.5 inch screen and examine any waste that accumulated on the 0.25 inch screen. Once again look through the particles retained on the 0.25 inch screen and add those that appear larger than 0.5 inch to the collection beaker.
7) After sampling is completed, discharge wastewater and the remaining solids to the waste conveyance system.

Sample Analysis

1) Take the sample collection beaker to a well-lit working area, or light box suggested in the equipment list, and measure the greatest dimension of each piece of seafood waste to the nearest 1/16 inch.
2) Record the number of seafood waste pieces that exceeded the 0.5 inch in the largest dimension on Grinder and Waste Conveyance Inspection Log (Attachment B).
3) When ten or more seafood processing waste particles exceed the maximum size requirement in a 5-gallon bucket of wastewater, corrective action (e.g., replacement of or sharpening the grinder plates, pump speed adjustment, size of cutting plate reduced from 0.5 inch down to 0.375 inch, addition of audio grinder, etc.) is required within seven days and must be noted on the log.
4) Once a month photographs are required to be taken of the seafood waste grind inspection procedure, as a data collection requirement. Input unique picture numbers into the grinder log to document the photographic record.

The United States Fish and Wildlife Service (USFWS) needs to document mortality of threatened species whenever possible. Fish and Wildlife Service programs that use this information include Endangered Species, Environmental Contaminants, Conservation Planning Assistance (to aid in recovery plans and implementation), and Law Enforcement (for enforcing the Endangered Species Act and other wildlife-related laws), in addition to numerous related research programs. Every dead spectacled and Steller's eider can aid in its species recovery by providing information on eiders found dead.

In the past, this protocol covered handling and transport of injured or sick eiders. Because of avian flu concerns, we cannot currently transport injured or ill eiders for rehabilitation, so we can no longer provide instructions or a protocol for handling them. To minimize your risk, we recommend that you do not contact or handle wild birds that appear to be ill or injured.

Due to concerns about contracting avian influenza from handling bird carcasses, please make sure that you have proper personal protective equipment (PPE) and training prior to observing carcasses. Do not collect or handle carcasses. Protect yourself from fluids and feces by using impermeable gloves, safety glasses, and a mask if necessary when going near (not touching) a bird to assist in determining sex and making observations of the bird(s).

Reporting

Report all dead spectacled and Steller's eiders as soon as possible. If there is no reason to suspect that the bird(s) died as the result of any illegal activity, you should attempt to contact the following people, in the order listed, until you reach someone.

1. Neesha Stellrecht, USFWS, Fairbanks: (907) 456-0297 work
2. Ted Swem, USFWS, Fairbanks: (907) 456-0441 work
3. Anchorage Fish and Wildlife Field Office, USFWS, Anchorage: (800) 272-4174 toll free, (907) 271-2888 work
4. Robert Suydam, North Slope Borough Department of Wildlife Management, Barrow: (907) 852-0350

<u>If you encounter any dead spectacled or Steller's eiders that you suspect may have died as a result of an illegal act such as shooting, a Service Law Enforcement Officer should be notified immediately.</u> <u>Ensure that one of the individuals in the above list is also contacted in these instances.</u>

You should be prepared to report any observations and/or knowledge you might have regarding the incident, and you may be provided with additional instructions regarding proper custodial handling techniques, which will allow a Special Agent to follow-up with an investigation into the incident.

USFWS, Office of Law Enforcement:

Fairbanks: (877) 535-1795 toll-free, (907) 456-2335, (907) 456-2356 fax

Nome: (907) 443-2479, (907) 443-2938 fax

Anchorage: (800) 858-7621 toll-free, (907) 271-2828, (907) 271-2827 fax

Regional Office, Anchorage: (907) 786-3311, (907) 786-3313 fax

Juneau Office: (907) 586-7545, (907) 586-7574 Fax

Your report should include:

1. Species, age, sex, and number of birds, date, time and location (latitude and longitude and area name).
2. Suspected cause of death.
3. Circumstances under which found.
4. If known, the names of witnesses or suspects, and a description of any vehicles or boats involved (but, non-law enforcement individuals are not expected to conduct investigations or obtain information that is not readily available).

If a camera is available, photograph birds and other evidence such as shotgun shells or casings, and persons and vehicles involved. Note photo date, time, and location. You should put all this information, plus any additional details you think important (such as location of nearest power line), in a short written narrative.

Appendix H

Pre-Installation/ Pre-Discharge Biological Survey

Pre-Installation / Pre-Discharge Biological Survey

Survey Purpose

The pre-discharge survey shall provide adequate site-specific information to indicate whether the proposed discharge will meet the requirements of an APDES seafood processing permit and to document the coastal marine, estuarine or fresh water biological resources (including habitat) which may be affected by the discharge, installation of any outfalls and any existing solids and or residues, such as seafood processing waste, in the discharge area.

Submittal of Information

The results of the pre-discharge survey shall be submitted with the submittal of new NOI, with an updated NOI at an existing facility's re-startup (after 12 months of no discharge), or with a modified NOI, when moving the location of a broken outfall line in installation of a new outfall line. The survey shall have been performed within the last 6 months, but prior to new outfall placement, or prior to re-startup of a facility which has not discharged for a period of greater than 12 months. The report shall provide transect sample site data, a summary of the survey, and whether the discharge area is appropriate for the proposed discharge, with careful consideration of excluded areas. The pre-discharge survey may be performed using a photographic survey method, but if any existing deposits are found within the survey area, a dive survey will be required. The dive survey performed will follow the Seafloor Survey Protocol found in this permit Appendix E. The pre-biological survey data for biological resources shall be submitted in writing, and may include the submittal of a narrated underwater video to the Department.

Quality Assurance Project Plan Information

The operator shall, prior to commencing survey operations, prepare a written, facility specific Quality Assurance Project Plan- Monitoring Plan (QAPP-Monitoring Plan) addressing the following:

1. Objectives for measurement data
2. Sampling procedures
3. Analytical procedures
4. Data reduction, validation, and reporting
5. Internal quality control checks
6. Specific routine procedures used to assess data precision, accuracy, completeness, representativeness, and comparability.

Survey requirements

The pre-discharge survey shall include a representative description of the numbers and species of marine organisms, types of aquatic vegetation/benthic fauna, and depths and substrate types where organisms/vegetation/benthic fauna are found within a 300 foot radius of the center of the proposed discharge site down to water depths of -120 feet MLLW. If conditions warrant, an increased areal extent of the survey area may be required by DEC, including a survey at depths exceeding -120 feet MLLW.

If seafood waste discharge has not occurred at the proposed site, a photographic survey (performed by Remotely Operated Vehicle -ROV) may suffice and the Department may not require a dive survey, establishment of hard transect lines or a central permanent marker. However, a rigorous, repeatable method shall be set out in a QAPP-Monitoring Plan. For example, the center of the proposed discharge area shall be located by triangulation from three land points and by GPS and the depth of the (proposed) outfall location at MLLW noted. If there are any significant benthic features that would help with re-locating the exact position of

the (proposed) outfall, (e.g. a unique rock feature) then this information is to be marked on the location map. The survey may be performed at the surface at low tide stage, without performing a dive survey if the representative habitat and water clarity is such that the pre-biological survey data is collected and data objectives can be met.

Establish Markers. A facility operator's QAPP-Monitoring Plan is required to include the establishment of at least five permanent shore-based or facility-based markers (monuments) at suitable locations, provided there is sufficient land/facility location to place five monuments. Some facilities are located over water, or the operator does not own the land the seafood processing facility is located on. The survey is required to document useable permanent underwater markers (large rock outcrops, boulders, etc.), or identify why markers/monuments were not established. If permanent markers are not established the operator shall work with the surveyor to establish repeatable methods for future surveyors to make observations and establish consistent transects. The operator's QAPP-Monitoring Plan is required to be updated to include the surveyor's established underwater markers for use in the next required seafloor survey. GPS coordinates derived using Wide Area Augmentation System (WAAS) technologies, or other equivalent technology, is required be recorded for each permanent shore or underwater marker.

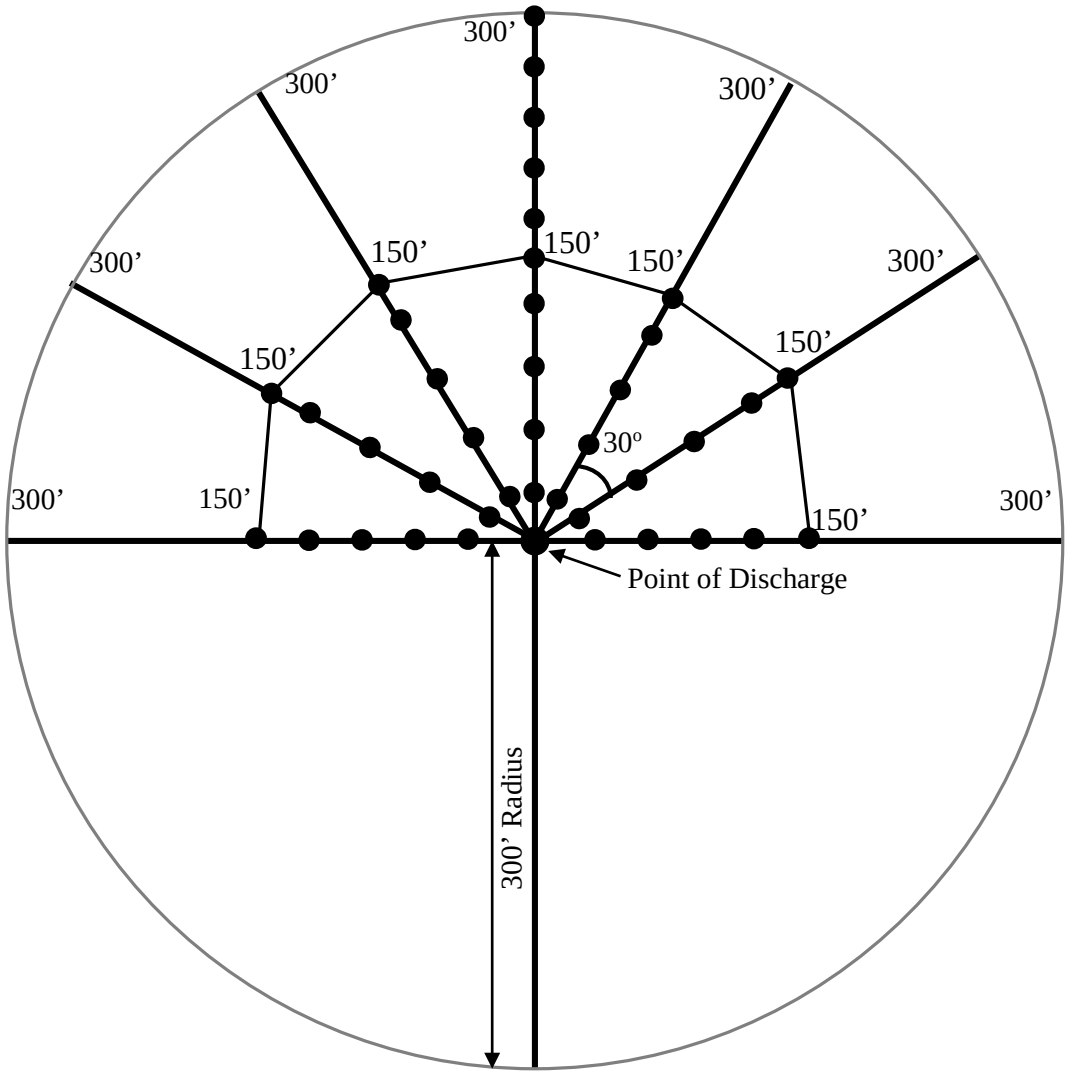
Establish Transect Lines. The surveyor must establish transect lines for the entire Pre-installation / Pre-Discharge Survey Area. The operator's QAPP-Monitoring Plan must develop and document the methods used to establish the transect lines. Parallel transects are required to be established no more than 30 feet apart and extend in a perpendicular direction from the permanent markers.

The survey shall use radial or parallel transects located to surround the outfall terminus with a 300 foot radius down to depths of proposed outfall terminus. Determine the number of transects (shall meet a minimum of at least three) which will most accurately delineate the area surrounding the center of the discharge site and the area of any seafood waste accumulation, if any.

Surveys using **Radial Transects**: Use the discharge point as the central marker of the survey. GPS coordinates derived using WAAS technologies shall be recorded at the location of the discharge point and the center of the survey (reported in decimal degrees to the fifth decimal place if available). Establish a minimum of at least three transects radially from the location of the discharge point. The number of transects should be adequate to cover the entire estimated area of discharge (at least a 300 foot radius around the point of discharge) and any historic seafood waste accumulation. If historic seafood waste accumulations are found, the operator is required to have the surveyor complete a seafloor dive survey following the Appendix E, Protocol, for a minimum of 300 feet from the proposed outfall terminus, or as determined size by DEC.,

The following diagram (Figure 1) shows "typical" radial transects set 30 degrees apart. Points of measurement are at 30-foot intervals spaced on the survey transects, which extend along a 300 foot radius from the point of discharge.

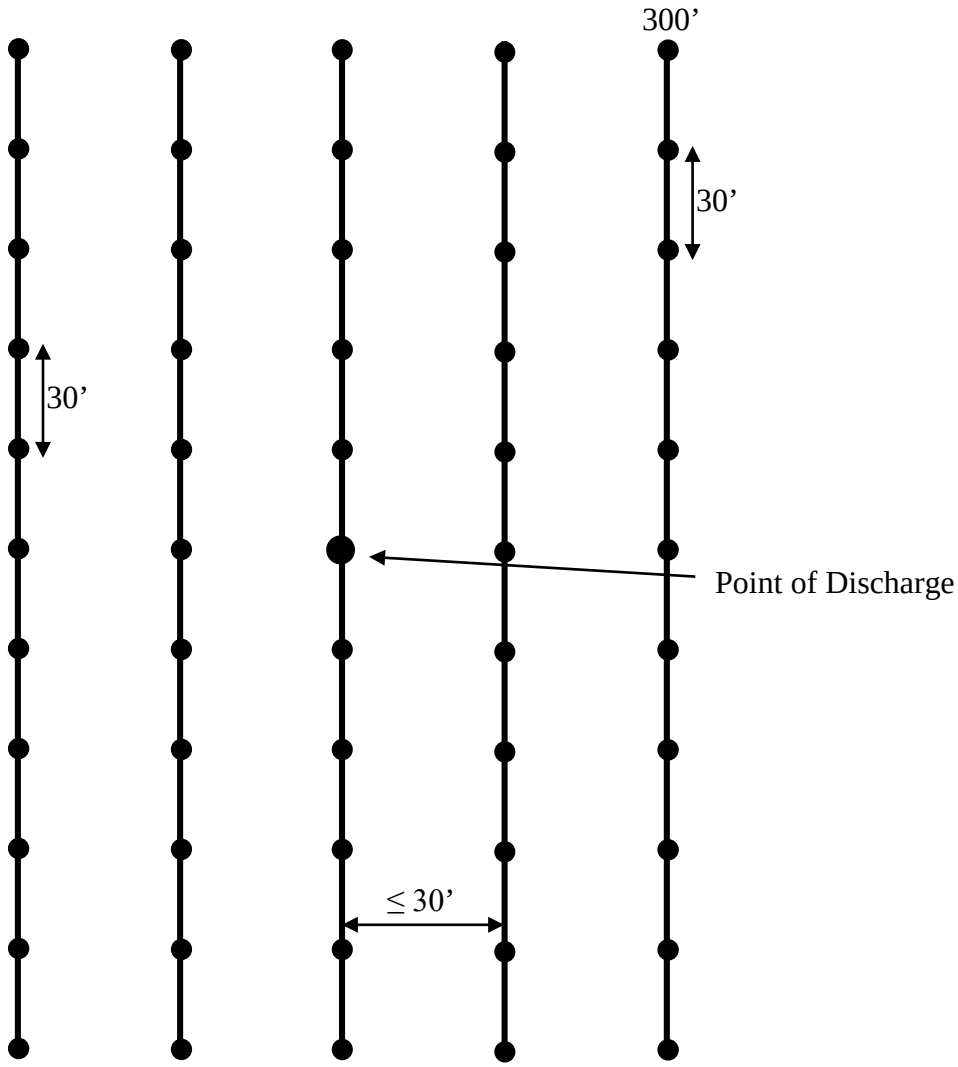
Figure 1 – Example of Radial Transect



Surveys using **Parallel Transects**: Use the discharge point as the central marker of the survey. GPS coordinates derived using WAAS technologies shall be recorded at the location of the discharge point (reported in decimal degrees to the fifth decimal place if available). A minimum of three (3) parallel transects should be established, with the center transect passing through or near the discharge point required. Transects should be no more than 30 feet apart and the number and length of transects should be adequate to cover the entire estimated area of discharge (at least a 300 foot radius around the point of discharge) and any historic seafood waste accumulation. Sample plots shall be identified at 30 foot increments along the transect lines. The sample plot's area shall be a 3-foot square.

The following diagram (Figure 2) shows "typical" parallel transects set no more than 30 feet apart. Points of measurement are at 30-foot intervals along the transect lines.

Figure 2 – Example of Parallel Transects



Reporting

Pre-biological Survey Report. Within 30 days of completing the pre-biological survey, a facility operator shall submit a report to DEC that contains the following information:

I. Facility Information

A. Permittee Name, APDES permit number, address, and contact information.
B. Type of waste treatment processes, product and by-product production processes.
C. Annual proposed or current discharge load (pounds) for each species processed.
D. The proposed discharge and/or current cumulative total annual discharge load (pounds).

II. Surveyor and Survey Information

A. Name and contact information of the surveyor.
B. Brief background of surveyor's previous work history performing photographic seafloor surveys and mapping.
C. Date and time the survey was completed.
D. Vessel Name, USCG number of vessel assisting in survey.
E. Name of the receiving water where the survey was completed.
F. Whether there are other seafood waste discharges within 0.25-mile of the discharge.
G. Information on whether a seafood processing discharge was occurring during the time(s) of the survey.
H. Method used to:
    1. Establish markers (if placed)
    2. Establish transects
    3. Located sample plot's grid locations along the transects,
    4. Record the required sample plot data.
I. Table or narrative with a summary of findings from video transects and sample location surveys.
J. A photographic log with photo number, transect number/ sample plot and photograph description, including GPS data collected from sample plots, shall be recorded and submitted electronically. Color photographs shall minimally be 3 inch x 5 inch and no more than four to a page.
K. For pre-installation surveys in the vicinity of a proposed outfall or discharge, recommendations for the location of the discharge at the proposed location or at an alternative location that would have less adverse impact to the sea floor community.

III. Sample Plot Location. Each sample plot location shall include the following:

A. **Digital photographs.** Digital photographs are required to:
    a. Depict the nature and coverage of seafood waste deposit(s), if any, on the seafloor at sample plot locations along radial or parallel transects.

b. Capture images of natural sediment, natural sediment covering seafood processing waste, if observable, and/or seafood waste covering sediment.
c. Be of sufficient definition, clarity, and detail to clearly document the conditions present on the seafloor.
d. Include a digital date and time stamp.
e. Be compiled into a photographic log to include the photographic sample plot location identifier.
f. Video recordings and photographs are required to be submitted electronically. If feasible, the electronic copy of the report, GIS/GPS map layers, video recordings and photographs are required to be submitted at the same time.

B. **Beggiatoa or other types of Bacterial Mats**. Document the absence or presence, as well as size and location of Beggiatoa or other microbial mats observed on or near any seafood waste deposits, or the seafloor if waste deposits are not evident. All Beggiatoa, or other bacterial mat areas shall be counted as continuous coverage.

C. **Sea Flora and Fauna.** Type and number of macro sea fauna (sea life) and type of aquatic vegetation observed on the seafloor during the photographic survey. Types and quantities of sea life observed adjacent to, on, in, or feeding on any seafood processing waste deposits during videotaping, along with representative photos, that include time and date stamp. Mention should be made of any indication of change in sea life behavior from any previous observation or seafloor survey reports, and any other observations relevant to the condition of the benthic community or seafloor.

D. **Hydrology.** Report ambient tidal current velocity and direction, and water chemistry (both seasonal and in-situ on the day of the survey, including salinity, water temperature, density, turbidity, DO and pH). These parameters should be taken as a grab sample or using a probe at the proposed outfall terminus location and proposed depth of outfall.

E. **Substrate.** Composition of substrate (soft sediments, cobble, gravels, solid rock and/or glacial silts, or ground seafood, etc.).

F. **Water depth.** (adjusted to MLLW, reported in feet) The depth shall be reported with the bottom reading measured at the seafloor, or at the top of any sample plot.

G. **Plume Size.** If actively discharging at time of survey, the estimated height (rise) and length of any observed discharge plume during the photographic survey. The surveyor shall note any changes in benthic habitat or sea flora/fauna use near the outfall terminus and at 100’ from the outfall terminus in the plume, or under the influence of the plume.

H. **Water Clarity.** A description of water clarity and changes of water clarity as a result of the discharge, if occurring.

If select information required in the Pre-biological Survey Report is not obtainable using the video/camera methods described above, the Report shall include an explanation as to why the information could not be obtained.

Other Approved Sampling Methods

A combination of sampling methods may be used to gather the information identified in this Pre-Installation Protocol as long as all data gathering and reporting objectives are met.

Sediment Grab Samples to Perform a Survey

A sediment grab sample is often used to supplement a dive survey, video by ROV, or benthic analysis with sediment profile imaging. Grab sampling surveys may be performed instead of a dive survey in areas where a dive survey is not practical due to limiting ambient conditions, very low visibility, or dangerous diving conditions. Grab sampling should not be used when bottom substrate is composed of large bolder type material or bedrock. Various types of sample collection devices and techniques are available. Often sediment and seafood waste identification is possible using push tube core samples that are collected by the surveyor. In other circumstances where a diver is not used, core samples are obtained from a bottom grab sampler, also known as a Van Veen sampler. Obtaining core samples of the top foot of the seafloor has a number of advantages. The benthic life successional stage may be determined, if background samples are also obtained, including infaunal and epifaunal species, density, and level of invasive species. Additionally, the true thickness of seafood or other solids deposited on the bottom can be measured depending on the type of the bottom grab sampler. Beggiatoa bacteria may be positively identified though coring/grab sampling, if present. Subsurface grain size and type of substrate can be identified. Grab sampling is required to be augmented by a photographic method, such as a video seafloor survey, to document the presence or absence of macro flora and fauna, and/or beggiatoa mats. Alternatively, the grab sampler would need attached depth and location instrumentation in order to provide a contour map.

Benthic Analysis by Sediment Profile Imaging

The benthic analysis by sediment profile imagining (SPI) method has been used in areas of large seafood waste coverage or areas of fine material (screened seafood waste) coverage or to assess the health of the benthic community in the area of a deposit. The sediment profile camera works by burying a knife edged probe that houses a digital camera into the waste pile. The probe is normally fitted with water depth and location instruments to provide seafloor contour information. The probe has a Plexiglas faceplate cover to collect images of the sediment profile. An internal strobe light is mounted inside to provide illumination. The probe housing the camera descends into the sediment at a slow, controlled rate to prevent the disturbance of the sediment-water interface. After an appropriate time delay, the strobe and camera are activated to obtain a cross sectional image of the upper 20 cm of the sediment column. Depth of penetration by the probe depends on the consistency (i.e., density and hardness of the sediment, thickness and type of seafood waste deposits, and the limit of the probe width). The probe is fitted with lights, a

plan view camera and laser generated scale to allow determination of the size of objects in the picture that is taken.

This survey method provides information that meets some data objectives, including: benthic life evaluation, estimations of anoxic condition and depth of anoxic conditions, presence or absence of Beggiatoa bacteria, thickness of waste to the limit of the probe, and estimates of continuous seafood waste deposit volume and discontinuous waste deposits areal extent. However, the method does have its limitations. The method is only suitable for sediments that can be penetrated by the knife probe, requires vessels large enough to handle the probe, and is susceptible to currents moving the vessel. The method is not suitable for characterizing deep deposits of waste, and the costs to complete the survey are usually higher than other survey methods.

Comparison of Various Survey Methods

Table H-1 compares the various survey methods and the data they provide. The video survey is somewhat similar to the dive survey in that visual evaluation is the primary tool for collecting the necessary data. The grab sample technique is similar to the SPI in that subsurface data about the seafloor can be obtained.

Table H-1 Survey Type Usability

Survey Method	Depth Limit	Current Limit	Low Visibility Limit	Survey Area Daily Limit	Size of ZOD Determination	Waste Thickness	Particle Size	Percent Waste Coverage	Benthic Assessment
Dive Survey	120 ft depending on equipment	2 knots	15 feet	2 acres/day	Excellent	Good	Good	Good	Poor
Video Survey	200 ft	3 to 5 knots	3 inches	12 acres/day	Good (depth of waste estimated)	Estimated	Good if laser scale is used	Good is visibility is acceptable	Poor
Grab Sampler Survey	200 ft	3 knots	0 inches	500 acres/day (Depends on method)	Good (depends on method and substrate)	Good (depends on sample method and equipment)	Good	N/A	Good
SPI Survey	200 ft	2 knots	0 inches except plan view photos	12 acres/day	Good (depends on substrate)	Poor beyond depth of probe window	Good	Good	Good

Appendix I

Partial List of Excluded Waters

Partial List of Excluded Waters

DEC compiled the following list of waters excluded from coverage under the permit. **This list is only a partial list of all of the waters that are excluded from coverage.** An operator is responsible for determining that a proposed discharge is **not** to an excluded water.

Abbreviations used as "Status" in Table below:

NM – national monument
NP – national park
Np – national preserve
NP&p – national parks and preserve
NM&p - national monument and preserve
NWR – national wildlife refuges
NWA – national wilderness area
SCHA – state critical habitat area
SGR – state game refuge
SGS – state game sanctuary
SMP-state marine park
SP-state park
W&SR – wild and scenic river
WQ-ar – water quality at-risk
IW – Impaired Waterbodies
TMDL –Total Maximum Daily Load completed for an IW
SBN – seabird nesting areas
SE - Southeast
SECH – Steller's eider critical habitat
SEWA – Steller's eider wintering habitat
SW - Southwest

Receiving Waters	Location	Status	Excluded Area
1. Admiralty Island, rivers and coastal waters	Admiralty Island, SE Alaska	NM	Admiralty Island National Monument
2. Akutan Harbor	Akutan Island, Eastern Aleutians	TMDL	Akutan Harbor
3. Alagnak River	Bristol Bay lowland west of the Katmai National Park and Preserve	W&SR	Alagnak River, 67 miles
4. Alatna River	Central Brooks Range	W&SR	Alatna River, 83 miles
5. Aleutian Islands, coastal waters	Bering Sea, Gulf of Alaska, Chukchi Sea, Pacific Ocean	NWR	Alaska Maritime NWR
6. Alinchak Bay	Alaska Peninsula	NWR	Becharof NWR
7. Alitak Bay	Kodiak Island	NWR	Kodiak NWR
8. Amber Bay	South Central Alaska Peninsula	NM&p	Aniakchak NM&p
9. Anchor River	In the center of the southern Kenai Peninsula, north of Homer	SCHA	Anchor River-Fritz Creek SCHA
10. Aniakchak Bay	South Central Alaska Peninsula	NM&p	Aniakchak NM&p
11. Aniakchak River	South Central Alaska Peninsula	W&SR	Aniakchak River, 63 miles, within the Aniakchak NM&p
12. Atka Island, includes Nazan and Korovin Bay	Aleutians	NWR	National Maritime Wildlife Refuge
13. Baird Inlet	West of Bethel	NWR	Yukon Delta NWR
14. Big River wetlands, north Redoubt Bay	West of the town of Nikiski	SCHA	Redoubt Bay SCHA
15. Chagvan Bay	South of Goodnews Bay	SGR/NWR	Togiak NWR

Partial List of Excluded Waters

Receiving Waters	Location	Status	Excluded Area
16. Charley River	Between the towns of Eagle and Circle in Interior Alaska	W&SR	Charley River, stretch of the larger Yukon River, 208 miles, W&SR within the Yukon-Charley Rivers Natural Preserve
17.Chilikadrotna River	Central Brooks Mountain Range	W&SR	Chilikadrotna River, 11 miles, W&SR within the Lake Clark NP&p
18. Chilkat River Wetlands	Adjacent to Klukwan, north of Haines	SCHA	Chilkat River, SCHA
19. Chinitna Bay	West of Homer on the west side of Cook Inlet	NP&p	Lake Clark NP&p
20. Chuck River	Flows into Windham Bay, north of Hobart Bay, SE Alaska	NWA	Chuck River NWA
21 Cinder River Delta and tidal flats	SW of the village of Pilot Point	SCHA	Cinder River SCHA
22. Cold Bay	Near town of Cold Bay on the Alaska Peninsula	NWR	Alaska Peninsula NWR, Izembek NWR
23. Cook Inlet shoreline near Kasilof	From Cape Kasilof south along the coastline to Happy Valley	SCHA	Clam Gulch SCHA
24. Copper River Delta	SE of the City of Cordova	SCHA	Copper River Delta SCHA
25. Coronation Island coves, bays and harbor	Located off the northwest coast of Prince of Wales Island, south of Kuiu Island and north of Noyes Island	NWA	Coronation Island NWA
26. Cross Sound	A passage in the Alexander Archipelago located between Chichagof Island to its south and the mainland to its north. It is 30 miles long and extends from the Gulf of Alaska to Icy Strait.	NP&p	Glacier Bay NP&p
27. Cube Cove	Located on the northwestern side of Admiralty Island	NM	Admiralty Island NM
28. Dixon Harbor	North Alexander Archipelago	NP&p	Glacier NP&p
29. Dude Creek	Located north of Icy Passage west of the town of Gustavus	SCHA	Dude Creek SCHA
30. Egegik Bay, southwest portion	West of the town of Egegik	SCHA	Egegik SCHA
31. Endicott River	Chilkat Peninsula, on the west side of Lynn Canal, 45 miles NW of Juneau and 30 miles south of Haines in SE Alaska.	NWA	Endicott River NWA
32. Etolin Island, coves, bay and inlets around the wilderness area	South end of Etolin Island about midway between Ketchikan and Wrangell on the Inside Passage and about 15 miles north of the community of Thorne Bay across Clarence Strait.	NWA	South Etolin NWA
33. False Pass	Located on Unimak Island on the southern end of the Alaskan Peninsula	NWR, SEWA	Alaska Peninsula NWR Alaska Maritime NWR Steller's Eider wintering area

Partial List of Excluded Waters

Receiving Waters	Location	Status	Excluded Area
34. Fox River Delta	Located at the head of Kachemak Bay, NE of Homer	SCHA	Fox River Flats SCHA
35. Fritz Cove	Stretches 9 miles along Gastineau Channel north west of downtown Juneau, SE Alaska	SGR	Mendenhall Wetlands State Game Refuge
36. Fritz Creek	In the heart of the southern Kenai Peninsula, spanning the Anchor River and Fritz Creek drainages north of the town of Homer	SCHA	Anchor River-Fritz Creek SCHA
37. Glacier Bay and its coves, bays and inlets	Adjacent to Gustavus, SE Alaska. Includes areas of northern Cross Sound and Icy Strait to Sea Otter Creek and outer coast to the Dry Bay Preserve	NP&p	Glacier Bay Nat'l Park and Preserve
38 Goose Bay	Located in Upper Cook Inlet on the west side of Knik Arm north of Anchorage	SGR	Goose Bay SGR
39. Hagemeister Strait, and coves, inlets and bays surrounding Togiak NWR	South of the town of Togiak located adjacent to Bristol Bay in southwest Alaska	NWR	Togiak NWR
40. Hallo Bay	Located on the west side of Shelikof Strait, west of Afognak Island in southwest Alaska	NP&p	Katmai Nat'l Park/Preserve
41. Hazen Bay	A 10-mile wide bay of the Bering Sea 37 miles SE of Hooper Bay in Western Alaska.	NWR	Yukon Delta NWR
42. Herendeen Bay,	Located SW of Port Moller on the Alaska Peninsula	NWR	Alaska Peninsula NWR
43. Herring Cove	South of the City of Sitka	TMDL	Herring Cove
44. Hooper Bay	Closest village is Hooper Bay in Western Alaska on the Bering Sea	NWR	Yukon Delta NWR
45. Icy Bay, north	NW of the City of Yakutat	NP&p	Wrangell-St. Elias Nat'l P&p
46. Isabella River wetlands	City of Fairbanks	SGR	Creamers Field SGR
47. Izembek Lagoon	Located on the northern shore of the Alaskan Peninsula near the community of Cold Bay	SGR NWR	Izembek SGR Izembek NWR
48. Jacksmith Bay	Located south of the village of Quinhagak in Western Alaska on Kuskokwim Bay	NWR	Togiak NWR
49. John River	Flows out of the Endicott Mountains located in the central Brooks Mountains Range. Closest town is Bettles.	W&SR	John River W&SR
50. Kachemak Bay	Kachemak Bay is a 64 km long arm of Cook Inlet, located on the SW side of the Kenai Peninsula. The communities of Homer, Halibut Cove, and Kachemak are on the bay within the SCHA. Seldovia is outside the SCHA.	SCHA	Kachemak Bay SCHA
51. Kaliakh River delta	West of Cape Yakataga on the Gulf of Alaska	SGR	Yakataga SGR
52. Kamishak Bay, including inner tidal flats	Located about 20 miles northwest of Cape Douglas. Iliamna Bay is on the north side of	NP&p	Katmai Nat'l Park/Preserve,

Partial List of Excluded Waters

Receiving Waters	Location	Status	Excluded Area
	Kamishak Bay and 13 miles north from Augustine Island. Homer is northeast of the bay.	SGR	McNeil River SGR
53. Kangirlvar Bay	Located on Etolin Strait in Western Alaska. Bethel is to the east.	NWR	Yukon Delta NWR
54. Karta Bay and Karta River	Located on Prince of Wales Island next to Kasaan Bay in SE Alaska	NWA	Karta NWA
55. Katmai Bay	Located adjacent to Shelikof Strait on the Alaskan Peninsula northwest of Kodiak Island	NP&p	Katmai Nat'l Park/Preserver
56. Kiliuda Bay	East side of Kodiak Island south of the town of Kodiak and north of Old Harbor	NWR	Kodiak NWR
57. Kinak Bay	Located adjacent to Shelikof Strait on the Alaskan Peninsula north west of Kodiak Island	NP&p	Katmai Nat'l Park/Preserver
58. King Cove	King Cove is located adjacent to Deer Passage and the village of King Cove. The town of Cold Bay is located to the northwest.	TMDL	King Cove
59. Knik River tidal flats	Located north of Anchorage at the head of Knik Arm in Cook Inlet.	SGR	Palmer Hay Flats SGR
60. Kobuk River	Headwaters in the Endicott Mountains and Walker Lake, the wild and scenic portion of the river courses south and west for 110 miles. It drains a large area on the southern side of the Brooks Range.	W&SR NP&p	Kobuk River, W&SR Gates of the Arctic NP&p
61. Kokechik Bay	Closest village is Hooper Bay in Western Alaska on the Bering Sea.	NWR	Yukon Delta NWR
62. Kootznoowoo, Bays, coves and inlets adjacent to the Kootznoowoo Wilderness Area	On Admiralty Island in SE Alaska. Closest village is Angoon.	NWA	Kootznoowoo NWA. The Kootznoowoo Wilderness includes most of Admiralty Island, except the Mansfield Peninsula, the village of Angoon, and Native lands along the island's western shore.
63. Koyukuk River, North Fork	Headwaters in the Endicott Mountains, drains on the southern side of the Brooks Range and is a tributary of the Yukon River. The village of Bettles is nearby.	W&SR NWA NP&p	North Fork Koyukuk River, W&SR, 102 miles Koyukuk NWA Gates of the Arctic NP&p
64. Kuiu Bays, coves, canals, and inlets adjacent to the Kuiu Wilderness Area	Located on the southern end of Kuiu Island in SE Alaska, bounded by Chatham and Summer Straits. Kake is the closest town.	NWA	Kuiu NWA
65. Kukak Bay	Located adjacent to Shelikof Strait on the Alaskan Peninsula northwest of Kodiak Island	NP&p	Katamai Nat'l Park/Preserve
66. Kulukak Bay	East of the village of Togiak on Bristol Bay	NWR	Togiak NWA
67. Kuskokwim River Delta and adjacent Bay	Located in southwest Alaska. Flows into Kuskokwim Bay on the Bering Sea. The	NWR	Yukon Delta NWR

Partial List of Excluded Waters

Receiving Waters	Location	Status	Excluded Area
	town of Bethel is located on the river to the northeast.		
68. Kuskokwim Bay, southern	South of the village of Good News Bay and northwest of the village of Togiak in western Alaska	NWR	Togiak NWR
69. Little Kamishak River, lower	Drains into Lower Cook Inlet and located on the Alaska Peninsula	SGS	McNeil River SGS
70. Lituya Bay	Located on the Gulf of Alaska about 97 miles southeast of Yakutat and 120 miles northwest of Juneau	NP&p	Glacier Bay Nat'l Park/Preserve
71. Lost Harbor	Akun Island, east Aleutian Islands	WQ-ar	Lost Harbor
72. Maurelle Islands,	Located off the northwest coast of Prince of Wales Island south of Kuiu Island and north of Noyes Island. The nearest town is Craig, 20 miles southeast of the islands.	NWA	Maurelle Islands, NWA
73. McNeil River, lower	Drains into Lower Cook Inlet and located on the Alaska Peninsula.	SGS	McNeil River, SGS
74. Misty Fjords, Canals, bays, islets and waters adjacent to and within the wilderness area.	Located in the Tongass Nat'l Forest in the southernmost part of SE Alaska. It extends from Dixon Entrance to beyond the Unuk River. The western boundary is about 22 miles east of Ketchikan.	NWA, NM	Misty Fjords NWA, Misty Fjords NM
75. Mulchatna River	Located in Southwestern Alaska, about 140 miles southwest of Anchorage.	W&SR	Mulchatna River, 24 miles, W&SR Lake Clark NP&p
76. Nelson Lagoon.	Located on the Alaska Peninsula, about 25 miles west of the village Port Moller	SCHA, SECH	Port Moller SCHA, Steller's Eiders Critical Habitat
77. Noatak River	Located in northwestern Alaska. Headwaters on Mount Igikpak in the Schwatka Mountains of the Brooks Range.	W&SR NP, NP&p NWA	Noatak River, W&SR Noatak NP Gates of the Arctic NP&P Noatak Wilderness
78. Nuka Bay	South Kenai Peninsula	Np	Kenai Fjords Nat'l Preserve
79. Nushagak Bay, west	Located about 30 miles southwest of the town of Dillingham. Bay opens onto Bristol Bay.West of the village of Clarks Point.	NWR	Togiak NWR
80. NW Gastineau Channel	Located between North Douglas island and the mainland. City of Juneau is southeast down the channel about 3 miles.	SGR	Mendenhall Wetlands SGR
81. Olga Bay	On the southern end of Kodiak Island.	NWR	Kodiak NWR
82. Pack Creek	Located north of Windfall Harbor and adjacent to Windfall Island on E. Admiralty Island in SE Alaska	SGS	Stan Price SGS
84. Palma Bay	SE Alaska	NP&p	Glacier Bay NP&p
85. Petersburg Creek	Located directly across the Wrangell Narrows west of Petersburg in SE Alaska	NWA	Petersburg Creek-Duncan Salt Chuck NWA

Partial List of Excluded Waters

Receiving Waters	Location	Status	Excluded Area
86. Perenosa Bay	Located on the northern end of Afognak Island.	SP	Afognak State Island Park
87. Pleasant Islands	Pleasant Island Is the largest island in Icy Strait between northern Chichagof Island and the mainland of the Alaska Panhandle. It lies southeast of Gustavus and southwest of Excursion Inlet.	NWA	Pleasant/Lemusurier/Inian Islands NWA
88. Popof Strait	Located between Popof Island and Unga Island south of the Alaskan Peninsula. Nearest town is Sandpoint.	IW	Popof Strait
89. Port Moller, south and other select bays, inlets and stretches of coastline.	Alaska Peninsula	NWR, SCHA, Steller's Eider CHA	Alaska Peninsula NWR, SCHA, Steller's Eiders CHA
90. Port Heiden	North-central Alaska Peninsula	SCHA, Steller's Eiders habitat	Port Heiden, SCHA Steller's Eiders habitat
91. Pribilof Islands, coastal waters	Bering Sea	NWR	Alaska Maritime NWR
92. Prince of Wales, bays, coves, inlets and the Barrier Islands	Located on the southern tip of Prince of Wales Island, 40 air miles southwest of Ketchikan in SE Alaska.	NWA	South Prince of Wales, NWA
93. Russell Fjord	The fjord extends north to Disenchantment Bay, the terminus of the Hubbard Glacier at the head of Yakutat Bay.	NWA	Russell Fjord NWA
94. Saint James Bay	Located on the west side of Lynn Canal on the Chilkat Peninsula northwest of Juneau in SE Alaska.	SMP	Saint James Bay
95. Salmon River	Flows out of the Baird Mountains and into the Kobuk River.	W&SR, NP	Salmon River W&SR, Kobuk Valley NP, 70 miles
96. Scammon Bay	Scammon Bay opens onto the Bering Sea in Western Alaska. The village of Scammon Bay is the nearest settlement.	NWR	Yukon Delta NWR
97. Security Cove	South of the town City of Platinum	NWR	Togiak NWR
98. Silver Bay	Located south of the town of Sitka in SE Alaska	TMDL	Silver Bay
99. Skilak Lake	Located about 16 miles east of Soldotna on the Kenai Peninsula	NWR, Kenai Wilderness Area	Kenai NWR Kenai Wilderness Area
100. Stikine River and tributaries	Located on the mainland of SE Alaska, 6 miles west of Petersburg and 7 miles north of Wrangell	NWA	Stikine-LeConte NWA
101. Susitna River tidal flats	West of the City of Anchorage	SGR	Susitna Flats SGR

Partial List of Excluded Waters

Receiving Waters	Location	Status	Excluded Area
102. Swamp Creek Wetlands	SW Kalgin Island in Cook Inlet	SCHA	Kalgin Island SCHA
103. Tanana River wetlands	West of the City of Fairbanks	SGR	Minto Flats SGR
104. Tebenkof Bay	Located on Kuiu Island in SE Alaska.	NWA	Tebenkof Bay NWA
105. Thorne Bay	Located 42 miles northwest of Ketchikan on Prince of Wales Island.	IW	Thorne Bay
106. Tinayguk River	Flows out of the Endicott Mountains of the Brooks Range. Nearest town is Bettles.	W&SR, NP&p	Tinayguk River W&SR, 44 miles Gates of the Arctic NP&p
107. Tlikakila River	Located on the Alaska Peninsula southwest of Anchorage. Flows into Lake Clark	W&SR, NP&p, Lake Clark Wilderness	Tlikakila River W&SR, 51 miles Lake Clark NP&p, Lake Clark Wilderness
108. Togiak Bay, mouth of	Walrus Islands and Summit Island located between Togiak Bay and Bristol Bay	SGS	Walrus Islands, SGS
109. Togiak Bay	Adjacent to the village of Togiak	NWR	Togiak NWR
110. Tonki Bay	Located on the northeast side of Afognak Island	SP	Afognak Island State Park
111. Tracy Arm and Endicott Arm	Located south of Juneau on the mainland in SE Alaska	NWA	Tracy Arm-Fords Terror NWA
112. Trading Bay	SW of the City of Anchorage	SGR	Trading Bay SGR
113. Tugidak Island coastal water	Tugidak Island, southwest of Kodiak Island	SCHA	Tugidak Island SCHA
114. Turnagain Arm, south shore	NW Kenai Peninsula	NWR	Kenai NWR
115. Turnagain Arm tidal flats	Adjacent to the City of Anchorage	SGR	Anchorage Coastal, SGR
116. Tustumena Lake	South of the town of Soldotna on the Kenai Peninsula	NWR, NWA	Kenai NWR, Kenai Wilderness Area
117. Tuxedni Bay	West of the town of Ninilchik along the coast of Cook Inlet	NP&p	Lake Clark NP&P
118. Two Arm Bay	Located on the east side of the Kenai Peninsula	Np	Kenai Fjords Nat'l Park
119. Udagak Bay	Located adjacent to Beaver Inlet on Unalaska Island in the Aleutians.	WQ-ar	Udagak Bay
120. Uganik Bay and Passage	Kodiak Island	NWR	Kodiak NWR
121. Ugashik Bay	South and west of the City of Pilot Point	SCHA	Pilot Point SCHA
122. Unalaska Bay, South	Unalaska Island in the Aleutians	TMDL	South Unalaska Bay
123. Uyak Bay	Kodiak Island	NWR	Kodiak NWR
124. Ward Cove	Located north of the City of Ketchikan in SE Alaska	TMDL	Ward Cove

Partial List of Excluded Waters

Receiving Waters	Location	Status	Excluded Area
125. Warren Island	Located off the northwest side of Prince of Wales Island in SE Alaska	NWA	Warren Island NWA
126. Willow Creek tributaries	NW of the City of Palmer	SCHA	Willow Mountain
127. Yakutat Bay, west	Adjacent to the City of Yakutat	NP&p	Wrangell-St. Elias NP&p
128. Yukon River delta	Flows into Norton Sound in Western Alaska	NWR	Yukon Delta NWR