

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Part 408**

[WH-FRL 1721-4]

Canned and Preserved Seafood Processing Point Source Category**AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Proposed response to petition for modification and amendment of regulations.

SUMMARY: The purpose of this notice is to amend the BPT and NSPS effluent limitations regulations affecting Alaskan subcategories of the Canned and Preserved Seafood Processing Point Source Category. This amendment results from EPA's proposed response to a petition for modification of BPT regulations, which also is being announced today.

The Petitions, submitted by a portion of the Alaskan seafood industry, request that the regulations cited in Section I, below, be modified to delete Anchorage, Cordova, Juneau, Ketchikan, and Petersburg from the "non-remote" Alaska subcategories. The practical effect of this modification would be to change the wastewater control technology from screening and solids handling to grinding for plants located in these areas. EPA proposes to grant the petition for the city of Juneau and to deny the petition for Anchorage, Cordova, Ketchikan and Petersburg. EPA also proposes to redefine the term "non-remote" for the Alaskan segment of the industry to eliminate the words "population center," and to include Ward's Cove as a "non-remote" area because of its proximity to the Ketchikan processing center. EPA is also considering and solicits comments on the addition of Dutch Harbor and the Kenai Peninsula to the list of "non-remote" processing centers.

DATES: A period of sixty days from the date of publication in the Federal Register will be allowed for submission of comments on this proposal. Comments must be received on or before March 10, 1981.

ADDRESS: Send comments in triplicate to: Mr. Daniel S. Lent, Effluent Guidelines Division, Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460, Attention: EGD Docket Clerk, Canned and Preserved Seafood Processing Industry, (WH-552). A copy of the supporting information and all public comments submitted in response to this proposal will be available for inspection and copying at

the EPA Public Information Reference Unit, Room 2404 (Rear) PM-213 (EPA Library), 401 M St., S.W., Washington, D.C. 20460; EPA Region X, 1200 6th Avenue, Seattle, Washington, 98101; and the EPA Alaska Operations Office, 701 "C" Street, Anchorage, Alaska. The EPA's Public Information regulation (40 CFR Part 2) provides that a reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Technical information may be obtained from Mr. Daniel S. Lent, at the address listed above, or call (202) 426-2707. Information concerning the economic analysis may be obtained from Mr. Arthur H. Berman, Office of Analysis and Evaluation (WH-586), Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460, or call (202) 755-2484.

SUPPLEMENTARY INFORMATION: On May 19, 1980, the Environmental Protection Agency suspended the applicability of the "best practicable control technology currently available" (BPT) effluent limitation requirements for the "non-remote" cities of Anchorage, Cordova, Juneau, Ketchikan and Petersburg, Alaska. See 45 FR 32676, May 19, 1980. The effect of the suspension was to relieve seafood processing facilities in those cities from BPT requirements based on screening solids from their effluent streams and instead to subject the facilities to the less stringent BPT effluent limitations applicable in "remote" cities.

In those cities, BPT effluent limitations are based on grinding the solids in the process wastewater and discharging them into the navigable waters adjacent to the processing plant. The suspension was to be in effect until October 15, 1980, by which time EPA expected to respond to a complete petition for modification of BPT effluent limitations filed by various seafood processing facilities in the affected cities. Because of the time required to obtain complete information from the petitioners, to review the petition and the public comments thereon, and to conduct the Agency's technical and economic analyses of the petition, the Agency was unable to respond to the petition by the October 15 date. The suspension will remain in effect until EPA makes a final decision.

Petitioners Pacific Seafood Processors Association, Morpac, Inc., Nefco-Fidalgo Packing Company, North Pacific Processors, E. C. Phillips & Son, Inc., Washington Fish & Oyster Company, and Whitney-Fidalgo Seafoods submitted their original petition for modification to EPA on May 7, 1980. Pursuant to the schedule established in

EPA's suspension notice, petitioners filed a supplemental petition on June 16, 1980. On July 16, 1980, EPA requested additional information, and petitioners responded to that request on August 15, 1980.

EPA has carefully reviewed the petition, supplemental petition, supplemental information, and other information available in the record. Based on this review, EPA today proposes to grant the petition to modify the BPT regulations to delete the city of Juneau, Alaska, from the "non-remote" Alaska subcategory. The Agency proposes to deny the petition to delete the cities of Anchorage, Cordova, Ketchikan and Petersburg from the group of "non-remote" subcategories. In addition, EPA proposes to revise the scope of the term "non-remote" so that the classification will be based solely on an area's character as a processing center; no area will be included solely by virtue of its being a population center. EPA proposes to amend BPT regulations for these subcategories by adding Ward's Cove (as part of Ketchikan) to the list of "non-remote" areas. EPA also is considering, but not proposing at this time, the addition of the Dutch Harbor and Kenai Peninsula as "non-remote" processing centers. The basis of EPA's proposal is explained below.

I. Statutory Requirements and the Current Regulations

The Clean Water Act, 33 U.S.C. 1251 *et seq.*, requires, among other things, that each point source, other than publicly owned treatment works (POTWs), must achieve, not later than July 1, 1977, effluent limitations based on the application of the best practicable control technology currently available ("BPT") as defined by the Administrator pursuant to Section 304(b) of the Act. Section 301(b)(1)(A). Section 304(b) requires the Administrator to publish regulations providing guidelines for effluent limitations. The factors relating to the assessment of BPT:

Must include consideration of the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application, and shall also take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate. Section 304(b)(1)(B).

The Administrator published effluent limitations guidelines for the seafood processing category on June 26, 1974 (39 FR 23134) and December 1, 1975 (40 FR

55770). The regulations provide for two groups of subcategories for Alaskan processors depending on whether the processor operates at a "remote" or a "non-remote" location. "Non-remote" facilities are those located in "population or processing centers." The regulations do not define that term but provide a non-exclusive list of cities deemed included. See 40 CFR 408.40, 408.60, 408.90, 408.162(b)(1), 408.165(a)(1), 408.172(b)(1), 408.175(a)(1), 408.200(b)(1), 408.202(b)(1), 408.205(a)(1), 408.292(b)(1), 408.295(a)(1), 408.312(b)(1), and 408.315(a)(1). In "non-remote" locations, BPT was based on screening the solids from the seafood processing wastewaters and disposing of the solids by some means other than discharge to navigable waters. In "remote" locations, by contrast, BPT was based merely on grinding the processing solids to reduce the size of the pieces, which could then be discharged into the navigable waters as a part of the facility's effluent.

The Association of Pacific Fisheries, a trade association representing processors in affected subcategories, and various processors including one of the present petitioners, challenged the EPA regulations in federal court. In those challenges, petitioners relied in large part on arguments similar to those put forward in the present petitions. The plaintiffs argued essentially that in evaluating BPT, EPA underestimated the costs and overestimated the benefits of using the screening rather than the grinding control technology. The United States Court of Appeals for the Ninth Circuit, exercising its original jurisdiction pursuant to section 509(b) of the Act, upheld the Agency BPT regulations in all respects challenged in the present petition. *Association of Pacific Fisheries v. EPA*, 615 F. 2d 794 (9th Cir. 1980). The Court found that "given the limitations the Agency faced when it adopted industry standards for the first time, * * * there was a sufficient basis for promulgating the regulations as an initial matter." 615 F. 2d 809. The Court noted, however, that various avenues for reexamination of the regulations remained, including the possibility that the processors might file with EPA a petition for reconsideration in order to advance evidence as to whether the agency should review its original actions. The present petition followed that decision.

II. Contents of the Petition

The essence of the petitioners' claim is that the classification of Juneau, Anchorage, Cordova, Ketchikan, and Petersburg as population or processing centers is unlawful under section 304(b) in that the classification fails to reflect

the statutory requirement that the Administrator consider the total cost of application of technology in relation to the effluent reduction benefits to be achieved. The petition noted that the Congress, in explaining the cost-benefit factor, stated:

The balancing test between total cost and effluent reduction benefit is intended to limit the application of technology only where the additional degree of effluent reduction is wholly out of proportion to the cost of achieving such marginal level of reduction for any class or category of sources.

A Legislative History of the Water Pollution Control Act Amendments of 1972, Serial No. 93-1, 93d Cong. 1st Sess. (1973), Vol I, 170 ("Legis. Hist."). According to the petition, EPA erred in both its determination of compliance costs and its assessment of the effluent reduction benefits.

A. Costs

The major cost elements associated with screening, according to the petition, are the cost of the barge to remove screened wastes and dock construction needed to accommodate the barging operation. The petition showed that while the petitioners' cost figures for the actual waste screening and storage did not significantly differ from EPA's estimates, their calculations on the cost of barging and dock facilities for individual plants were much higher than EPA's analysis. EPA estimated that the average capital cost for barges would be \$25,000 per plant; petitioners' estimates, in contrast, ranged from \$225,000 to \$485,000 in barge costs per plant, with an additional \$90,000 to \$172,000 required per plant for dock expansion.

The discrepancy in barging cost derives from the nature of the barges on which the estimates were based. EPA's July 16, 1980 letter requested information as to why large, elaborate, fully equipped and self-propelled barges were required to haul the wastes the relatively short distances—from one to five miles—which were contemplated, rather than using simple scows with tugs. Petitioners responded that the barges must be water tight, must be large enough to handle peak capacity waste volumes, and must be self-propelled for ease of operation and to assure crew and vessel safety in rough weather. Petitioners further asserted that cooperative barging is not desirable because a plant cannot be dependent on a competitor's equipment.

Petitioners' supplemental information also included materials on asserted dock construction requirements and costs. These consisted primarily of drawings of the plant sites showing the additions claimed to be necessary, and a

brief synopsis, without costs, of four common piling types used as dock support in Alaskan waters, including a notation that creosote-treated fir bearing piles are normally used. The response to questions showed dock costs of \$130.00 per square foot if concrete pilings are used and \$100.00 per square foot if creosoted wood pilings are used. In the petition, all dock construction costs are based on using concrete pilings.

B. Effluent Reduction Benefits

Turning to the other half of the cost/benefit comparison, the processors' petition asserts that screening in Alaska, other than in the city of Kodiak, achieves no effluent reduction benefit.

The petition points out that the effluent from seafood processing plants includes only seafood residuals; nothing is added during the processing. The petition recognizes that "effluent reduction benefits" pursuant to the statute are not primarily water quality benefits but simply the reduction in pounds of waste discharged into the water. The petition asserts, however, that in all areas of Alaska other than Kodiak, screening achieves no effluent reduction benefit because the only practicable disposal method is to barge the wastes and to dispose of them in the ocean, so that the same number of pounds of seafood waste enter the water after the screening as would be discharged by only grinding and discharging at the dock. The petition contends that the effluent enters the food chain at a high level as a food source for birds, fish and crabs.

The petition acknowledges that processors in other areas of the United States have available various options, including landfill, discharge into municipal sewers, and the use of seafood waste reduction facilities for by-product recovery. It recognizes that some reduction facilities are operating in Alaska but denies that these form the basis of a feasible option for any of the petitioners. Thus, the petition notes that a reduction facility in Kodiak operates at a loss, even though the city has seventeen facilities and processes year round. The petition further states that the reduction facility in Petersburg is operated by a competitor of the Whitney Fidalgo, Petersburg, petitioner; it questions the capacity of that reduction facility, expresses concern about relying on a competitor's plant, and claims that the petitioner would incur high costs to use the facility because it would need to widen its dock to move the fish wastes to shore and through the center of Petersburg.

Another reduction facility operates at Seward, Alaska, about one hundred

miles down a paved, year-round road from Anchorage. Five smaller processors in Anchorage who did not join the present petition haul their wastes to the Seward reduction facility. The data submitted for petitioner Whitney-Fidalgo, Anchorage, indicates that use of this facility would cost the petitioner less than barging from the same location. Again, however, the petition contends that the plant cannot rely on its competitor's facility for its waste disposal; in addition, it states that the road between Anchorage and Seward may be impassible or subject to significant load limitations during early parts of the processing season.

The petition notes that an EPA contractor evaluated the possibility of developing reduction facilities at other locations, particularly Cordova and Ketchikan. The contractor concluded that facilities in those cities could operate at a profit. The petition, however, contends that this analysis erred both in overstating the percentage of raw waste material that could be recovered and in undersizing the proposed Cordova facility. As a result, petitioners contend that facilities in either location would not be profitable.

The final aspect of the petitioners' denial of effluent reduction benefits is that although the petition is not based on seafood wastes being environmentally innocuous, there is evidence in fact that the wastes are not harmful and may actually have beneficial environmental impacts.

C. Other Factors

Finally, the petition contends that the Administrator did not consider other significant factors in establishing BPT. Thus, it contends that screening and barging involves significant energy demands, that storage of seafood wastes may create unsanitary conditions barred by U.S. Food and Drug Administration and Alaska standards, and that the costly screening and barging requirements will adversely affect the ability of American processors to compete with foreign-owned floating processors, in conflict with policy statements contained in the legislative history of the 1978 amendments to the Fisheries Conservation and Management Act, 16 U.S.C. 1801 *et seq.*

III. Framework for Decision

A. Cost of Technology and Effluent Reduction Benefits

The processors' petition for an EPA rulemaking to revise the "non-remote" classification of various Alaskan cities in connection with two groups of subcategories for the seafood processing

industry in Alaska is a proper request for amendment of a rule under 5 U.S.C. P.O. Box 553(e). The petition correctly states the controlling issue in this petition: that under section 304 of the Clean Water Act, the Administrator must consider "the total cost of application of technology in relation to the effluent reduction benefits to be achieved by such application." To decide the petition, the Administrator must analyze the relation of costs to effluent reduction benefits in each of the cities for which reclassification is requested. The Agency must apply a consistent framework to each city's analysis.

In contending that the BPT screening requirement will force processors to undergo unreasonably high costs, petitioners assert that certain barging and dock construction expenses would have to be incurred to dispose of the screened wastes. EPA is in general not persuaded by a number of the petitioners' assertions as to the type of barge and the extent and nature of dock improvements which would be necessary to sustain an adequate barging operation. The petitioners' rather general statements regarding the logistics of a barge and tug, numbers of trips and possible weather conditions are not sufficient to convince the Agency that only large, sophisticated, self-propelled barges could be used. Neither is EPA convinced that the indicated extent of dock expansion and quality of dock construction are necessary and the most cost-efficient means of handling the screened wastes, if barging is necessary.

More importantly, however, EPA questions the petition's premise that barging is in fact the appropriate disposal method for screened seafood wastes for facilities operating in most of the areas covered by the petition. Rather, EPA believes that in every area but Juneau, the number and size of the processors, the quantity of wastes produced, the length of the processing season and other factors, including, in some cases, the proximity of existing reduction facilities, make it possible to process the screened wastes at existing or feasible seafood waste reduction facilities. Thus, BPT effluent limitations can reasonably be based on a technology consisting of screening the wastes and disposing of the wastes through recycling in a reduction facility.

Where the cost of installing and operating a reduction facility is reasonable, definite effluent reduction benefits can be achieved because a lower total amount of pollutants will be disposed of in the water. EPA believes

that the petition fails to take adequate account of this potential effluent reduction benefit associated with the screening technology. Therefore, applying as a test the question whether the costs of the technology are "wholly out of proportion" to the cost of achieving projected effluent reduction benefits (see *Legis. Hist.* cited above, see also *Association of Pacific Fisheries v. EPA*, 615 F.2d at 805), EPA concludes that the screening technology is BPT for seafood processors in any location where waste reduction facility costs are not unreasonable.

The petition challenges the EPA contractor's determination that processing centers in Cordova and Ketchikan could be profitable. EPA has performed an updated cost analysis reflecting petitioners' concerns. This analysis, described in the specific discussion of the Cordova area, below, found that whether the facility could be profitable depended upon prevailing fish meal prices. If fish meal prices are assumed to be \$425.00 per ton, the costs of using a reduction facility in Cordova would not be unreasonably burdensome for Cordova processors. In any event, the potential profitability of the plant is not determinative of whether a reduction facility may constitute a reasonable waste treatment technique. There is no provision in the Clean Water Act holding that waste treatment methods may be considered only where EPA can prove that they will produce net revenues.

Of course, effluent limitations only prescribe discharge limitations: Individual point sources are free to achieve the limitations by any lawful means, and therefore a petitioner may choose to barge the wastes to an acceptable ocean disposal site rather than employing a separate or collective reduction facility. Even if barging is employed, it is not clear that no effluent reduction benefit would result. As the Ninth Circuit noted in *Association of Pacific Fisheries*, while it was reasonable for EPA to find that some plants would choose a land-based reduction center rather than barging, the Act also permits EPA to consider the improvement in near-shore water quality which would result from barging to be an effluent reduction benefit. 615 F.2d at 806-807. Analogously, the Marine Protection, Research, and Sanctuaries Act, 33 U.S.C. 1401 *et seq.*, generally exempts from its permitting requirements the transportation for dumping or dumping of fish wastes, but not if the wastes are deposited in protected or enclosed waters or if the Administrator finds that the deposits

could have adverse effects. 33 U.S.C. 1412(d). Thus, the MPRSA also recognizes the benefit of relocating waste disposal from certain waters to other areas of the ocean.

The present petition does not make it clear that no adverse environmental effects have occurred from near-shore discharges. To the contrary, the petition itself acknowledges that, at least in the past, adverse conditions have occurred near the discharge points. Similarly the Ninth Circuit found that the record refers to such effects at Cordova, Petersburg, Kodiak, and Anchorage. 615 F.2d at 807. In addition, comments from the Fish and Wildlife Service, U.S. Department of the Interior, filed in response to EPA's notice of the present petition, refer to the accumulation of seafood wastes in the area of the discharges, the gathering of scavengers including bears, the presence of noxious conditions caused by odors, bacteria and decomposition, and the public health hazards present in tidal waters affected by seafood waste discharges. The Interior Department's comments also take issue with the claim that the seafood residual discharges constitute a valuable food source. Instead, the Department advises that high-volume discharge, through an outfall in areas where accumulation and deposition on the sea floor is likely, results in conditions not amenable to ready recycling of the waste into the food chain. The Municipality of Anchorage also commented that near-shore disposal is creating undesirable environmental impacts in that city. These are evidenced by the attraction of seagulls to the area, which is within one half mile of the central business district.

The Agency has also studied the environmental impact of seafood waste discharges, most recently updated and summarized in a report to the Congress as required by Section 74 of the Clean Water Act as amended in 1977. The *Section 74 Seafood Processing Study* identified adverse water quality impacts and associated nuisance problems in marine waters at locations in Alaska and the contiguous states. The degree to which these problems occurred depended on site-specific conditions such as the amount of waste discharged and the hydrological conditions of the receiving waters. For example, the most severe water quality impact was documented at the Dutch Harbor processing center where investigations in the areas of outfalls found accumulations of sludge and whole fish parts, generation of toxic hydrogen sulfide gas, depressed dissolved oxygen levels, and the absence of benthic life.

Similar environmental impacts, although less severe, were noted in Cordova and Kenai.

Properly controlled barge disposal in more open waters where better dispersion can occur will eliminate these problems. Thus, at-sea disposal will result in near-shore effluent reduction benefits even for any processors in processing centers who prefer ocean disposal of the screened wastes.

Petitioners' other objections to imposition of the screening requirements are not persuasive. The petition refers to the high energy costs of barging. EPA does not believe that barging waste for distances of less than two miles will result in high energy costs, judging from the experience at one company which showed insignificant fuel use during a recent processing season. Furthermore, barging is not needed if a reduction facility is used. Next, the petition remarks on the potential sanitary problems of waste storage but fails to indicate the extent of storage that would be required, particularly if reduction facilities are used, nor to explain why the problem is more serious for the Alaskan "non-remote" processors than for other American seafood processors. The petitioners also fail to note that there are FDA approved methods which are in use in Alaska for storing such material at the plant site. See 42 FR 14338, March 15, 1977. Finally, petitioners suggest that screening costs will impair the competitive position of American processors, in contravention of Congressional pronouncements in connection with the Fisheries Conservation and Management Act amendment of 1978. EPA does not believe that the Congress intended that the 1978 legislative history excerpt quoted in the petition should be read to authorize inadequate waste treatment by American seafood processors in the name of protecting them from foreign competition.

In summary, in areas where seafood waste reduction facilities are available or can be installed, use of the reduction technology will result in a clear effluent reduction benefit in terms of a lower total quantity of pollutants discarded into the water. Further, where waste reduction facilities can be used, barging will not be necessary, unless a processor uses a barge to transport wastes to the reduction facility, so that the processors will not incur any barging expense as an incident of achieving BPT effluent limitations. However, even where barging is selected, the Agency concludes that effluent reduction benefits will result.

B. Other Statutory Factors

Section 304(b) requires the Administrator to consider various additional factors in assessing BPT. Under the statute, the Administrator must take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, non-water quality environmental impact (including energy requirements) and other factors that the Administrator deems appropriate. EPA has considered these factors in the present proposal.

The age of seafood processing equipment and facilities, the type of process, engineering aspects of the application of various types of control techniques, and process changes are not at issue. An effluent screening device can readily be installed in each plant at the point of the facility's discharge. No complex engineering is required. The age of the facilities is not relevant, and no internal process change is required.

Further, the Agency believes that the non-water quality environmental impact of the technology will not be excessive. Reduction facilities should have no adverse air quality impact. Any odor problems associated with the operation of a reduction facility can be eliminated by proper plant location and operating procedures.

IV. Cost Analysis and Economic Impact Analysis

A. Introduction

Executive Order 12044 requires EPA and other agencies to perform Regulatory Analyses of certain regulations. See 43 FR 12661, March 23, 1978. EPA's proposed regulations for implementing Executive Order 12044 require a Regulatory Analysis for major or significant regulations involving annualized compliance costs of more than \$100 million or meeting other specified criteria. See 44 FR 30938, May 29, 1979. Where these criteria are met, the proposed regulations require EPA to prepare a formal Regulatory Analysis, including an economic impact analysis and an evaluation of regulatory alternatives. The proposed changes in regulations for the canned and preserved seafood processing industry do not meet these criteria and thus do not require a formal regulatory analysis.

B. Cost Reasonableness

The cost for Alaska seafood processing plants in Anchorage, Cordova, Petersburg, and Ketchikan to implement individual screening and collective reduction range from \$0.003 to

\$0.025 per pound of waste removed. These costs of achieving BPT can be compared with other industries' costs of achieving BPT to provide a perspective on their reasonableness. In a portion of the fruits and vegetables processing industry, the average cost of wastewater treatment to meet BPT effluent limitations for a group of model plants was \$0.10 per pound of conventional pollutants removed, with a range of \$0.03 to \$0.19. In the corn wet milling subcategory of the grain milling industry, the cost for a medium-sized model plant was \$0.14 per pound of conventional pollutants removed. The cane sugar refining industry shows a cost of \$0.14 per pound of conventional pollutants removed for a small model plant. These costs have been adjusted to 1980 dollars by a standard construction cost index. It is readily apparent that the projected BPT costs in these four Alaskan areas are substantially less than BPT costs for other industries and therefore entirely reasonable.

In Juneau, EPA projected that screening and reduction would cost \$0.18 per pound. This figure is a major step higher than costs projected for the rest of the petitioners, because the collective treatment available in other areas cannot currently be implemented in Juneau. EPA does not believe that it is reasonable to promulgate effluent limitations that would impose a disproportionate cost on a discharger whose isolated Alaska processing location precludes the type of collective waste disposal that accounts for the lower costs elsewhere in Alaska.

C. Cost Analysis

EPA has analyzed the cost of reduction facilities for each area where reclassification has been requested. The Agency prepared an initial study pursuant to Section 74 of the Clean Water Act Amendments of 1977. Following receipt of the present petition, EPA updated that study. The updated study, *Market Feasibility Study of Seafood Waste Reduction in Alaska*, November 1980, analyzed the cost of individual and collective reduction facilities based on 1980 information regarding production data, costs, and fish meal and fish oil prices. Updated assumptions regarding inflation and interest rates were also used.

EPA's current analysis used a discounted cash flow model to determine the costs of reduction for each area in the petition. The Agency's approach is more fully described in the aforementioned report.

The 1980 EPA study indicates reduction costs per area as follows:

Table A

Area	Total pounds of waste removed per year	Reduction cost (dollars per ton)
Petersburg.....	10,000,000	¹ +8.08
Ketchikan.....	15,000,000	² 7.86
Cordova.....	12,000,000	22.71
Anchorage.....	2,800,000	³ 64.91
Juneau.....	760,000	324.55

¹ Profit.
² Wastes from Ward's Cove are included in the analysis for Ketchikan.
³ Anchorage processors have the option of hauling wastes to the reduction facility at Seward at a net cost of \$8-12 per ton.

A sensitivity analysis of the EPA study indicates that the feasibility of reduction facilities is sensitive to changes in the price of fish meal. EPA recognizes that the price is fairly volatile, having ranged from a low of \$318.00 to a high of \$505.00 per ton between 1977 and 1980. The reduction costs reflected in Table A are based on an average fish meal price of \$425.00 per ton. The Agency believes that this price fairly represents average market conditions for 1980. However, it must also be noted that increased finfish landings and more favorable fishmeal prices will further decrease the cost of reduction and potentially allow some of these facilities to become profitable. The Agency solicits comments and data on the factors which influence the economics of reduction.

D. Economic Impact Analysis

EPA has done an economic impact analysis for BPT and a draft analysis for soon-to-be-proposed BCT regulations for the seafood processing industry. These analyses are based on the costs of screening and barging for processors in all Alaskan subcategories, with both "remote" and "non-remote" status. Although the petitioners only challenge the cost/benefit relationship of the current BPT regulations and do not allege that adverse economic impacts result from the current requirements, EPA re-examined the BCT cost study in the interest of thoroughness. An economic impact analysis based on the costs of reduction facilities was not done due to time constraints.

The BCT study, *Draft Report: Economic Impact Analysis of Proposed Limitations Guidelines for the Canned and Preserved Seafood Processing Point Source Category, July 1980*, is more recent than the BPT report and is therefore based on more timely data. It confirms that screening and barging (as opposed to screening and collective reduction) have negligible impacts on Alaskan processors. In fact, the analysis shows that Alaskan processors are economically strong. Out of 164 plants analyzed throughout Alaska, EPA

projected that only two plants might be forced to close as a result of proposed BCT cost burdens. These plant closures would result in an employment loss of 100 people.

The two projected closures are small processors in the mechanized salmon subcategory. All medium-sized and large-sized plants in this subcategory will remain economically viable after the imposition of treatment costs. The study further indicated that all plants in all other Alaskan seafood processing subcategories will remain economically viable after installing the required technologies.

The study was done on a model plant basis across subcategories, not specifically for plants at the locations in the petition. The impact analysis results were extrapolated from the model plants to qualitatively assess potential impacts. Thus the projected closures cannot be correlated with any of the petitioners' plants.

The most recent cost analysis and market feasibility study, referenced earlier, examines reduction and barging costs on a plant-by-plant basis as well as collectively for the five locations represented by petitioners. The results clearly indicate that economics of scale can be achieved in both collective reduction and collective barging.

In this study collective reduction was, in all but two cases, found to be less costly on a dollar per ton of waste basis than individual barging. Thus, one may reasonably infer that collective reduction will not have excessively adverse economic impact because individual barging causes minimal levels of economic impacts. Specific economic impact levels have not been analyzed for the costs of reduction facilities. Also, if barging in processing centers is organized on a collective basis, economic impacts, already judged to be low, should be further lessened.

V. Proposed Response to Petition and Amendment to Regulations

A. Summary

The Agency proposes to grant the petition for the city of Juneau and to deny the petition for Anchorage, Petersburg, Ketchikan, and Cordova. Under this proposal, Juneau's designation for BPT would change from "non-remote" to "remote." The other areas would remain "non-remote" for BPT purposes. EPA proposes to revise the scope of the term "non-remote" to eliminate the concept that a locality will be so classified solely on the basis of its character as a population center. The Agency also proposes to include Ward's Cove in the Ketchikan processing center.

Finally EPA proposes to amend the regulations providing new source performance standards in these subcategories to assure that new sources in areas classified as "non-remote" for BPT purposes will also employ the screening technology.

B. Feasibility of Reduction Facilities

EPA's BPT effluent limitations guidelines for the "non-remote" Alaska seafood processors subcategories are based on screening. In proposing to retain this technology for four of the cities named in the petition, EPA examined the options for disposal of the screened waste. Where seafood waste reduction facilities may be available, implementation of the guidelines not only would result in removing the waste solids from the water but also in recovering for other uses a significant portion of the waste. EPA's proposed classification of the various localities as "non-remote" is based on the Agency's belief that each of these areas qualifies as a processing center and that collective reduction facilities can be operated in each locality.

The seafood commodities being processed at the petitioners' facilities command high prices in the market place. The screened waste solids are similar in character, yet they are discarded as valueless. Reduction facilities are a proven method of converting both finfish and shellfish waste into marketable products. Research indicates that promising avenues may exist to improve the economics of shellfish waste reduction in Alaska. Reduction facilities can process salmon, herring and bottom fish wastes into fish meal and fish oil.

Finfish reduction is a wet process. The wastes may or may not be chopped, depending on their size. The wastes are then cooked to denature flesh protein and break the cell walls to allow subsequent separation of solids from the oil and water liquor. The cooked fishmeal is strained and pressed, after which the presscake is shredded, dried, strained, ground, and packaged. Meanwhile, the press liquors are desludged, purified, deodorized and steamed to produce the fish oil. Solids removed from the fish oil production process are added to the fish meal. Thus, essentially no waste is created. Five tons of finfish waste, when processed, can produce approximately one ton of fish meal and 0.4 tons of fish oil. The remaining portion is predominantly water, most of which is removed by evaporation, with the balance added to the dried meal to improve its palatability to animals.

These items can sell for over \$400.00 per ton.

Fish meal is used as a protein source for animal feeds. It currently provides only about 10 percent of the total proteins used in animal feeds. It competes with other high-protein feed supplies, including oilseed meals such as soybeans, animal residues and grain proteins. Soybean meal is the largest competitor currently providing about 45 percent of the protein for processed feeds. EPA has ascertained that fish meal prices and soybean meal prices over the last thirty years show a high degree of association.

The reduction technology for shellfish wastes, such as shrimp or crab, usually consist of grinding, drying and packaging; cooking may also occur, depending on the character of the wastes. Shellfish meal has a lower protein content than fish meal and hence is less marketable, selling for about \$125.00 per ton. However, the natural polymer chitin and its derivative, chitosan, can be derived from shellfish wastes.

Chitin and chitosan production and its variations currently remain in the pilot stage of development. Essentially, chitin and chitosan production involves mechanical separation of the adventitious protein, demineralization of the residual shell with dilute acid, deproteinization with a dilute alkali and deacetylation of the chitin with caustic soda to produce chitosan. Possible commercial applications of the product include use in textile, paper processing, wastewater treatment, photography, and pharmaceuticals.

Because shipment of needed chemicals to Alaska might be difficult, EPA's analysis of the feasibility of chitosan production assumed that the mechanical separation and stabilization of shellfish wastes would be completed in Alaska and the wastes would be transported to Seattle for the chemical processing. EPA's analysis was hampered by the pilot nature of existing facilities, the unavailability of confidential, proprietary information, lack of production of cost data regarding reported large-scale production in Japan, Poland and Russia, and by the variability of costs and marketability of chitin and chitosan depending on the specie, location and quality of source material employed. Nonetheless, EPA's analysis indicated that the process has a real potential for cost effective production.

The Agency realizes that further market development is necessary before large-scale chitin plants are feasible. Because of the uncertainties regarding chitin/chitosan production, EPA

particularly solicits comments on this aspect of the present proposal. This information will be especially important in determining whether reduction can be profitable in the Dutch Harbor area where waste production is primarily from shellfish.

Finfish reduction technology has long been used in Europe. Proven systems now operating in this country are still supplied by European manufacturers. The European-manufactured equipment involves a high capital expense because of transportation costs and duties. However, several American made systems are currently marketed or planned for marketing in the near future. These systems show an approximately 20 percent lower capital cost than the European systems. The American-made reduction systems are also claimed to have lower energy requirements and therefore lower operating costs. Although EPA's analysis of the present petition used the cost of the European reduction systems to ensure that the cost of solids reduction would not be underestimated, it is likely that actual reduction facility costs may be lower than EPA estimates, if American equipment is used.

The petition raised the issue of reliance on a competitor for waste disposal. In areas where competitors own existing reduction facilities, the Agency feels that suitable long term contractual arrangements can be agreed upon between processors and competitors who operate facilities. EPA notes that the economic viability of the reduction facility depends on a supply of raw material, namely, the seafood wastes. The competitor therefore may have an incentive to contract for delivery of the petitioner's wastes. The contract can cover allocation of capacity during peak loads. Plant expansion may also be attractive to the competitor, if a petitioner's waste is known to be available for processing.

For areas where reduction facilities are not in operation, processors may choose not to operate their own reduction facilities. However, a facility might be constructed and operated by an independent entrepreneur under contract with the various potential users, as is currently the case in Kodiak. A nearby municipality might also be willing to construct a facility. Either of these options would avoid the question of competitive use of the plant. This arrangement could be employed whether or not the reduction operation was profitable. In Kodiak, for example, where the reduction facility operates at a loss because of the high volume of shellfish waste processed, the

processors using the facility subsidize its operation.

A key factor determining the feasibility of reduction or any other solids disposal option for processors in Alaska is the amount of processing waste available for the processing or joint disposal. EPA recognizes that a processor's location in a population center has no bearing on that question, and that the costs of solids disposal for an isolated processor might be considerably higher than for a processor that has access to a collective solids disposal operation. Therefore, EPA believes that the definitions of "remote" and "non-remote" need revision.

EPA intends the term processing center to cover any geographic area within which processors can reasonably achieve economies of scale by arranging for collective disposal of screened seafood wastes. Thus, under the proposed revision the term would not only include individual cities but would also cover any area where feasible highway or barge transportation would permit collective waste disposal.

The Agency proposes to remove the words "population center" from the definition of "non-remote" areas, in order to focus on processing centers, and to add Ward's Cove (as a part of Ketchikan) to the areas designated as "non-remote."

C. Revision of New Source Performance Standards

In addition to defining the limitations achievable by the application of BPT in the Alaska seafood processing subcategories of issue here, EPA regulations also provide new source performance standards ("NSPS") for processors in these locations, pursuant to section 306 of the Clean Water Act. EPA believes that any new sources in these locations, classified as "non-remote" for BPT purposes, should also be required to meet effluent limitations based on screening technology because new processors should be able to participate in collective waste disposal or reduction facilities employed by existing processors in these areas. Therefore, EPA proposes to amend the regulations to provide that all areas categorized as "non-remote" for purposes of BPT are also categorized as "non-remote" for purposes of NSPS.

D. City-by-City Analysis

This section analyzes each area in light of the information discussed above.

Juneau

EPA proposes to grant the petition to reclassify the City of Juneau as "remote." Granting of the petition for

Juneau is based on the relatively high projected cost for screening and solids disposal as compared with costs in areas currently classified as "non-remote" and with the costs of the other petitioners. The Agency believes that because of the limited amount of waste generated in this area (under 800,000 pounds per year), and the distance to other processors, Juneau should not be classified as a processing center, notwithstanding its substantial population.

Because of the relatively low quantities of waste generated in Juneau, EPA analysis indicates that the cost of barging and ocean disposal per ton of waste would be more than three times as expensive as for other petitioners. The Agency also considered solids disposal options other than barging for the Juneau petitioner. The nearest reduction facility is 120 miles away in Petersburg. Access to this facility would be by barge, and the cost of transportation would be prohibitive. The limited amount of waste generated would make the cost of building and operating an on-site reduction facility in Juneau very high, \$325.00 per ton of waste processed, compared with the costs of these facilities in processing centers. The city of Juneau has indicated a willingness to accept some seafood waste in its municipal wastewater treatment system in order to help promote greater efficiency in the systems' biological treatment units. However, the city would probably have difficulty in disposing of all the seafood wastes generated. Therefore, if the municipal treatment system was utilized, additional solids disposal would still be needed. In summary, EPA believes that Juneau should not be classified as a processing center. However, of course, any future significant changes in the amount of seafood processed in Juneau could require a change in the area's classification.

Anchorage

EPA proposes to deny the petition to reclassify Anchorage as "remote." The proposed denial is based on two factors. First, the Anchorage petitioner has reasonable access to a reduction facility located at Seward. In addition, the municipality of Anchorage, commenting on the petition, strongly urged denial.

The Seward reduction facility is about 100 miles from Anchorage and can be reached by paved road which is open year round. The general feasibility of hauling seafood wastes from Anchorage to Seward is attested to by five non-petitioner processors in Anchorage which have been using this method for

the last two years. Some load restrictions may be imposed on road use during the winter, but since production declines during this period, EPA believes that load restrictions would not impair waste hauling. In any case, EPA notes that the Anchorage processors hauling to Seward have access to the Anchorage city landfill on an emergency basis, at a cost of \$5.00 per ton.

EPA estimates hauling costs from Anchorage to the Seward facility at \$20.00 per ton of waste, based on the experience of the five Anchorage processors who have been using the Seward facility. The Seward facility has been paying the processors from \$8.00 to \$12.00 per ton, depending on the type of waste. The net cost therefore is expected to be between \$8.00 and \$12.00 per ton.

As further support for the denial, EPA notes that the Municipality of Anchorage plans to build a small boat harbor within a few hundred feet of the petitioning cannery's outfall. The Municipality's comments on the petition state that the City has twice advised the cannery that any aesthetic, public health or navigation problems resulting from the operation must be avoided. The Municipality also indicated concern that serious water quality problems may arise if the suspension of EPA's screening requirements is continued. The Municipality's water quality concerns alone are not, of course, determinative of the question of available technology. However, they do further emphasize the significance for this location of the effluent reduction benefits which the technology can achieve.

Petersburg

EPA proposes to deny the petition to reclassify Petersburg as "remote." Denial is proposed because a reduction facility already exists in Petersburg, providing a viable alternative for disposal of petitioner's wastes at reasonable cost. Inclusion of the petitioner's wastes with those of other processors in the area would make this a profitable reduction facility. Acceptance of this petition could result in closure of this facility, if additional Petersburg processors turned to discharging their wastes. Unemployment from closing of the reduction facility and environmental damage could result.

EPA estimates that three round trips per day by a five ton flat bed truck would be adequate to carry the petitioning facility's peak production waste to be reduction plant. It appears that this can be arranged without a large dock addition. The Agency believes that long term contractual agreements could

be reached between the petitioner and the reduction facility that would minimize any problems that might be created by petitioner's reliance on a competitor's facility.

The Agency also believes that the existing collective reduction facility, with a capacity to process 100 metric tons per day of waste solids and with additional solids storage capacity, is large enough to handle waste supplied during peak waste generation, amounting to 53,000 pounds of waste solids per day from the petitioning facility.

Ketchikan and Ward's Cove

EPA proposes to deny the petition to reclassify the City of Ketchikan as "remote," and to add Ward's Cove as an additional "non-remote" location as a part of the Ketchikan processing center. This proposed action is based on consideration of the extent of seafood processing in the Ketchikan/Ward's Cove area. First, there are three processors in Ketchikan, accounting for roughly 11,000,000 pounds of waste per year. An additional processor operates at Ward's Cove, 3.2 miles by road from Ketchikan. This processor generates approximately 5,000,000 pounds of waste per year. EPA believes that the Ward's Cove and Ketchikan processors are sufficiently close that they could participate in a joint waste reduction facility and that their combined wastes are sufficient to justify such an undertaking. The proposed redefinition of "non-remote" focusing on processing centers would cover the Ketchikan/Ward's Cove area as a unit.

The inclusion of the Ward's Cove facility with the three other Ketchikan facilities increases the amount of waste produced in that area by approximately 40 percent, based on 1980 production data. A revised cost analysis shows that a collective reduction facility with a capacity of 250 metric tons per day of waste solids, could process the waste produced by all plants in this processing center for about \$8.00 per ton of waste. This is based on conservative estimates—a 20 percent fish meal recovery rate and a fish meal price of \$425.00 per ton. Should the actual average fish meal price be higher than \$425.00 per ton, reduction facility operators would realize higher levels of revenue. Consequently, the net costs of solids disposal for the processors would be lower.

Projected increases in bottom fish processing should also help a Ketchikan reduction facility achieve a positive return. The hatcheries program in Cordova, if proven successful, might also be implemented in Ketchikan. This

would tend to smooth out the cyclic nature of salmon production and related waste available for reduction.

Cordova

EPA proposes to deny the petition to reclassify the City of Cordova as "remote." The primary reason for the proposal is that four processors are located in Cordova and generate sufficient waste, on the order of 12,000,000 pounds per year, to make Cordova a viable site for a reduction facility. Also, a salmon hatchery program has been initiated in Cordova in an effort to smooth out the cyclic nature of the salmon runs. If this program proves successful, it should assure a more constant supply of salmon for the Cordova processors and hence a more certain supply of seafood processing wastes for a reduction facility in the city.

Petitioners argued that an EPA contractor's feasibility study for a Cordova reduction facility was based on erroneous assumptions. EPA's updated market feasibility study utilized a larger collection reduction facility with a capacity of 100 metric tons of waste solids, and considered a 20 percent, not 25 percent, fish meal recovery rate, consistent with the position taken in the Petition. The result, based on a fish meal price of \$425.00 per ton and a shell fish meal price of \$125.00 per ton, showed an average cost of reduction to be \$22.71 per ton of waste. Here again, higher fish meal prices would result in lower net solids disposal costs for the processors. Furthermore, larger returns can also be expected if bottom fish processing increases or if there is any increase in salmon production.

EPA notes that the city of Cordova itself had commenced a feasibility study relating to installation of a reduction facility. This study was halted when EPA's suspension of Cordova's "non-remote" classification made it appear that processors would continue grinding and discharging, so that no wastes would be available for reduction. EPA is optimistic that this study may be resumed.

VI. Response to Comments

EPA received five comments on and recommended responses to the petition for modification. A summary of each of these submissions follows:

1. Comment: The Department of Interior, Fish and Wildlife Service, Anchorage, Alaska, stated generally that seafood wastes can generate water quality problems and that barging, if properly planned and implemented, can achieve an effluent reduction benefit. The commenter also pointed out that

any relaxation of effluent standards will inhibit the development of recycling technologies. The Fish and Wildlife Service recommended denial of the petition.

Response: EPA proposes to follow the commenter's recommendation as to most petitioners.

2. Comment: The State of Maine, Department of Environmental Protection, also stated that discharge of seafood wastes can generate water quality problems. It asserted that the cost of screening and barging for the petitioners is not out of line with the amount spent for water pollution control by many other industries. According to this commenter, the Alaskan petitioners have been given an unfair economic advantage by not having to install BPT treatment by 1977, and recommended that screening be maintained as a minimum level of treatment for the petitioning seafood processors.

Response: EPA agrees with this recommendation as to most petitioners.

3. Comment: The Municipality of Anchorage indicated that the present outfall from the petitioning processor in Anchorage is located within a few hundred feet of a proposed site of a small boat harbor. Water quality and navigation problems may occur if present discharge practices continue. Any suspension of BPT beyond the 1981 season would be looked on very seriously by the Municipality. The Municipality of Anchorage thus recommended denial of the petition for the Municipality of Anchorage.

Response: EPA proposes to follow the Municipality's recommendation.

4. Comment: Chugach Natives, Inc., stated that it is hard for people, economically affected, to understand technology-based regulations when the actual and apparent impact is negligible. There is no adequate basis in effluent reduction versus economic impact when barging or landfill are the only cost-effective solids disposal alternatives. The commenter recommended that EPA accept the petition, at least for Cordova.

Response: EPA proposes to deny the petition for Cordova. As explain some depth previously, EPA believes that a collective reduction facility can be operated in the Cordova processing area at reasonable economic cost or possibly even at a profit. Use of a reduction facility would prevent pollutants from being returned to the ocean and hence would result in a clear effluent reduction benefit.

5. Comment: Chugach Alaska Fisheries, Inc., explained that it processes seafood in the Cordova area and is affected by the Cordova suspension and offers many jobs and

processes the catches of many local fishermen. It states that although this facility is classified as part of the Cordova processing area, in fact the economics of scale do not apply. The commenter urges EPA to consider the results of new advances in grinding technology. It asserted that a fish meal plant in the Cordova area would not be a profitable venture. Therefore, it was recommended that EPA grant the petition for the Cordova area.

Response: EPA proposes to deny the petition for Cordova, for reasons set forth in the response to comment 4.

VII. Solicitation of Comments

The Agency, in revising the definition of "non-remote" to focus on processing centers, has identified two additional areas which can be considered as "non-remote." They include the Kenai Peninsula and Dutch Harbor.

The Agency particularly invites comments regarding inclusion of these two processing centers as "non-remote" for purposes of compliance with BPT regulations.

Alternatively these processing centers may be included as "non-remote" in the soon-to-be-proposed BCT regulations, which would allow processors at these locations until 1984 to comply with effluent limitations based on screening technology.

Kenai Peninsula

The Kenai Peninsula hosts many seafood processors within a relatively small geographical area. Their combined waste production in 1976 was greater than 6,800,000 pounds. The processors are dispersed around the perimeter of the peninsula in such municipalities as Kenai, Soldotna, Ninilchik, Homer, and Seward. Locations within the peninsula are linked with a modern paved road system. EPA believes the existing collective reduction facility at Seward is accessible to processors on the peninsula. The capacity of this plant, 150 metric tons per day, should be adequate to handle all the waste from processors on the Peninsula as well as the wastes from Anchorage's petitioning processor.

Dutch Harbor

The Dutch Harbor area has grown in recent years to be the second largest seafood processing port in the world, in terms of total fish landed. Data from 1976 show that over 27,500,000 pounds of waste are generated there per year.

The Agency is aware that seafood processing in Dutch Harbor is limited almost exclusively to shellfish, and that the economics of a reduction facility for shellfish wastes are less favorable than those for finfish wastes. EPA also

recognizes that barging conditions in the Bering Sea can be difficult. The Agency is also aware that most processors in this area are located on boats which leaves little space for screening and solids collection. The Agency's initial cost analysis showed that reduction would be more costly in Dutch Harbor than in most other processing centers.

In light of the problems which may develop in attempting to dispose of screened seafood wastes in the Dutch Harbor area, EPA particularly solicits comments on this area in the "non-remote" classification.

The Agency also solicits comments, data, and information on the following:

(1) Feasibility of shellfish reduction and chitin/chitosan production and marketing, and the long-term economic prospects for these products.

(2) Possible increase in finfish landings and improved market conditions which result in more favorable conditions for implementing finfish reduction processes in Alaska, including the potential for improved, American-made reduction technologies.

(3) Finfish and shellfish landing projections and all related technical and economic factors which bear upon waste disposal and reduction in the Dutch Harbor and Kenai Peninsula areas, including:

a. transportation costs to Washington of by-products

b. present waste treatment equipment in place

(4) Information on the market for Alaskan seafood by-products such as:

a. factors affecting supply

b. demand trends

c. price trends

d. growth potential of the fish meal market

e. relationship with and future trends in competing soybean and oil markets

(5) Any information that would assist the Agency in assessing plant specific economic impacts of reduction facility costs for "non-remote" processors to include:

• production data

• financial data

(6) Possible use of seafood wastes as an energy source through methane production.

Dated: December 31, 1980.

Douglas M. Costle,
Administrator.

Subpart D—Non-Remote Alaskan Crab Meat Processing Subcategory

1. Section 408.40 is proposed to be revised to read as follows:

§ 408.40 Applicability; description of the non-remote Alaskan crab meat processing subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing, in non-remote Alaska, of dungeness, tanner, and king crab meat. The effluent limitations contained in this Subpart D are applicable to facilities located in processing centers including, but not limited to, Anchorage, Cordova, Ketchikan and Ward's Cove, Kodiak, and Petersburg.

Subpart F—Non-Remote Alaskan Whole Crab and Crab Section Processing Subcategory

2. Section 408.60 is proposed to be revised to read as follows:

§ 408.60 Applicability; description of the non-remote Alaskan whole crab and crab section processing subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing, in non-remote Alaska, of dungeness, tanner and king whole crab and crab sections. The effluent limitations contained in this Subpart F are applicable to facilities located in processing centers including, but not limited to, Anchorage, Cordova, Ketchikan, and Ward's Cove, Kodiak, and Petersburg.

Subpart I—Non-Remote Alaskan Shrimp Processing Subcategory

3. Section 408.90 is proposed to be revised to read as follows:

§ 408.90 Applicability; description of the non-remote Alaskan shrimp processing subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing of shrimp in non-remote Alaska. The effluent limitations contained in this Subpart I are applicable to facilities located in processing centers including, but not limited to, Anchorage, Cordova, Ketchikan and Ward's Cove, Kodiak, and Petersburg.

Subpart P—Alaskan Hand-Butchered Salmon Processing Subcategory

4. Section 408.162(b)(1) is proposed to be revised to read as follows:

§ 408.162 [Amended]

* * * * *

(b) * * *

(1) Any hand-butchered salmon processing facility located in a processing center including, but not limited to, Anchorage, Cordova, Ketchikan and Ward's Cove, Kodiak, and Petersburg shall meet the following limitations:

limited to, Anchorage, Cordova, Ketchikan and Ward's Cove, Kodiak, and Petersburg shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	Metric units (kilograms per 1,000 kg of seafood)	
TSS	44	26
Oil and grease	29	11
pH—Within the range 6.0 to 9.0.		
	English units (pounds per 1,000 lb of seafood)	
TSS	44	26
Oil and grease	29	11
pH—Within the range 6.0 to 9.0.		

7. Section 408.175(a)(1) is proposed to be revised to read as follows:

408.175 [Amended]

(a) * * *
 (1) Any mechanized salmon processing facility located in a processing center including, but not limited to, Anchorage, Cordova, Ketchikan and Ward's Cove, Kodiak, and Petersburg shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	Metric units (kilograms per 1,000 kg of seafood)	
TSS	42	25
Oil and grease	28	10
pH—Within the range 6.0 to 9.0.		
	English units (pounds per 1,000 lb of seafood)	
TSS	42	25
Oil and grease	28	10
pH—Within the range 6.0 to 9.0.		

Subpart T—Alaskan Bottom Fish Processing Subcategory

8. Section 408.202(b)(1) is proposed to be revised to read as follows:

§ 408.202 [Amended]

* * * * *
 (b) * * *
 (1) Any Alaskan bottom fish processing facility located in a processing center including, but not limited to, Anchorage, Cordova, Ketchikan and Ward's Cove, Kodiak, and Petersburg shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	(Metric units) kg/kg of seafood	
TSS	3.1	1.9
Oil and grease	4.3	0.58
pH—Within the range 6.0 to 9.0.		
	(English units) lb/1,000 lb of seafood	
TSS	3.1	1.9
Oil and grease	4.3	0.58
pH—Within the range 6.0 to 9.0.		

9. Section 408.205(a)(1) is proposed to be revised to read as follows:

§ 408.205 [Amended]

(a) * * *
 (1) Any Alaskan bottom fish processing facility located in a processing center including, but not limited to, Anchorage, Cordova, Ketchikan and Ward's Cove, Kodiak, and Petersburg shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	(Metric units) kg/kg of seafood	
TSS	1.9	1.1
Oil and grease	2.6	0.34
pH—Within the range 6.0 to 9.0.		
	(English units) lb/1,000 lb of seafood	
TSS	1.9	1.1
Oil and grease	2.6	0.34
pH—Within the range 6.0 to 9.0.		

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	Metric units (kilograms per 1,000 kg of seafood)	
TSS	2.6	1.6
Oil and grease	0.31	0.19
pH—Within the range 6.0 to 9.0.		
	English units (pounds per 1,000 lb of seafood)	
TSS	2.6	1.6
Oil and grease	0.31	0.19
pH—Within the range 6.0 to 9.0.		

5. Section 408.165(a)(1) is proposed to be revised to read as follows:

§ 408.165 [Amended]

(a) * * *
 (1) Any hand-butchered salmon processing facility located in a processing center including, but not limited to, Anchorage, Cordova, Ketchikan and Ward's Cove, Kodiak, and Petersburg shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	Metric units (kilograms per 1,000 kg of seafood)	
TSS	2.3	1.4
Oil and grease	0.28	0.17
pH—Within the range 6.0 to 9.0.		
	English units (pounds per 1,000 lb of seafood)	
TSS	2.3	1.4
Oil and grease	0.28	0.17
pH—Within the range 6.0 to 9.0.		

Subpart Q—Alaskan Mechanized Salmon Processing Subcategory

6. Section 408.172(b)(1) is proposed to be revised to read as follows:

§ 408.172 [Amended]

(b) * * *
 (1) Any mechanized salmon processing facility located in a processing center including, but not

Subpart AC—Alaskan Scallop Processing Subcategory

10. Section 408.292(b)(1) is proposed to be revised to read as follows:

§ 408.292 [Amended]

* * * * *

(b) * * *

(1) Any Alaskan scallop processing facility located in a processing center including, but not limited to, Anchorage, Cordova, Ketchikan and Ward's Cove, Kodiak, and Petersburg shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	(Metric units) kg/kg of seafood	
TSS.....	6.6	1.4
Oil and grease.....	7.7	0.24
pH—Within the range 6.0 to 9.0.		
	(English units) lb/1,000 lb of seafood	
TSS.....	6.0	1.4
Oil and grease.....	7.7	0.24
pH—Within the range 6.0 to 9.0.		

* * * * *

11. Section 408.295(a)(1) is proposed to be revised to read as follows:

§ 408.295 [Amended]

(a) * * *

(1) Any Alaskan scallop processing facility located in a processing center including, but not limited to, Anchorage, Cordova, Ketchikan and Ward's Cove, Kodiak, and Petersburg shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	Metric units (kilograms per 1,000 kg of seafood)	
TSS.....	5.7	1.4
Oil and grease.....	7.3	0.23
pH—Within the range 6.0 to 9.0.		
	English units (pounds per 1,000 lb of seafood)	
TSS.....	5.7	1.4
Oil and grease.....	7.3	0.23
pH—Within the range 6.0 to 9.0.		

Subpart AE—Alaskan Herring Fillet Processing Subcategory

12. Section 408.312(b)(1) is proposed to be revised to read as follows:

§ 408.312 [Amended]

* * * * *

(b) * * *

(1) Any herring fillet processing facility located in a processing center including, but not limited to, Anchorage, Cordova, Ketchikan and Ward's Cove, Kodiak, and Petersburg shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	(Metric units) kg/kg of seafood	
TSS.....	32	24
Oil and grease.....	27	10
pH—Within the range 6.0 to 9.0.		
	(English units) lb/1,000 lb of seafood	
TSS.....	32	24
Oil and grease.....	27	10
pH—Within the range 6.0 to 9.0.		

* * * * *

13. Section 408.315(a)(1) is proposed to be revised to read as follows:

§ 408.312 [Amended]

(a) * * *

(1) Any herring fillet processing facility located in a processing center including, but not limited to, Anchorage, Cordova, Ketchikan and Ward's Cove, Kodiak, and Petersburg shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	(Metric units) kg/kg of seafood	
TSS.....	23	18
Oil and grease.....	20	7.3

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
pH—Within the range 6.0 to 9.0		
	(English units) lb/1,000 lb of seafood	
TSS.....	23	18
Oil and grease.....	20	7.3
pH—Within the range 6.0 to 9.0.		

* * * * *
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