

Title 40—Protection of the Environment  
 CHAPTER I—ENVIRONMENTAL  
 PROTECTION AGENCY  
 SUBCHAPTER N—EFFLUENT GUIDELINES  
 AND STANDARDS  
 [FRL 328-4]

PART 408—CANNED AND PRESERVED  
 SEAFOOD PROCESSING POINT SOURCE  
 CATEGORY

Interim Final Rule Making

Notice is hereby given that effluent limitations and guidelines for existing sources set forth in interim final form below are promulgated by the Environmental Protection Agency (EPA). On June 26, 1974, EPA promulgated a regulation adding Part 408 to Title 40 of the Code of Federal Regulations (39 FR 23134). That regulation established effluent limitations and guidelines for existing sources and standards of performance and pretreatment standards for new sources for the canned and preserved seafood processing point source category. The regulation set forth below will amend 40 CFR, Part 408—canned and preserved seafood processing point source category by revising § 408.10 of the farm-raised catfish processing subcategory (Subpart A), § 408.20 of the conventional blue crab processing subcategory (Subpart B), § 408.30 of the mechanized blue crab processing subcategory (Subpart C), § 408.40 of the non-remote Alaskan crab meat processing subcategory (Subpart D), § 408.50 of the remote Alaskan crab meat processing subcategory (Subpart E), § 408.60 of the non-remote Alaskan whole crab and crab section processing subcategory (Subpart F), § 408.70 of the remote Alaskan whole crab and crab section processing subcategory (Subpart G), § 408.80 of the dungeness and tanner crab processing in the contiguous States subcategory (Subpart H), § 408.90 of the non-remote Alaskan shrimp processing subcategory (Subpart I), § 408.100 of the remote Alaskan shrimp processing subcategory (Subpart J), § 408.110 of the northern shrimp processing in the contiguous States subcategory (Subpart K), § 408.120 of the southern non-breaded shrimp processing in the contiguous States subcategory (Subpart L), § 408.130 of the breaded shrimp processing subcategory (Subpart M), and § 408.140 of the tuna processing subcategory (Subpart N) to expand the applicability thereof; and by adding thereto effluent limitations and guidelines for existing sources for the fish meal processing subcategory (Subpart O), Alaskan hand-butchered salmon processing subcategory (Subpart P), Alaskan mechanized salmon processing subcategory (Subpart Q), West Coast hand-butchered salmon processing subcategory (Subpart R), West Coast mechanized salmon processing subcategory (Subpart S), Alaskan bottom fish processing subcategory (Subpart T), non-Alaskan conventional bottom fish processing subcategory (Subpart U) non-Alaskan mechanized bottom fish processing subcategory (Subpart V), hand-shucked clam processing subcategory

(Subpart W), mechanized clam processing subcategory (Subpart X), Pacific Coast hand-shucked oyster processing subcategory (Subpart Y), Atlantic and Gulf Coast hand-shucked oyster processing subcategory (Subpart Z), steamed/canned oyster processing subcategory (Subpart AA), sardine processing subcategory (Subpart AB), Alaskan scallop processing subcategory (Subpart AC), non-Alaskan scallop processing subcategory (Subpart AD), Alaskan herring fillet processing subcategory (Subpart AE), non-Alaskan herring fillet processing subcategory (Subpart AF), and abalone processing subcategory (Subpart AG) pursuant to sections 301, 304 (b) and (c) of the Federal Water Pollution Control Act as amended (33 U.S.C. 1251, 1311, 1314 (b) and (c) 86 Stat. 816 et seq.; P.L. 92-500) (the Act). Simultaneously, the Agency is publishing in proposed form standards of performance for new point sources and pretreatment standards for existing sources and for new sources.

(a) LEGAL AUTHORITY

Section 301(b) of the Act requires the achievement by not later than July 1, 1977, of effluent limitations for point sources, other than publicly owned treatment works, which require the application of the best practicable control technology currently available as defined by the Administrator pursuant to section 304(b) of the Act. Section 301(b) also requires the achievement by not later than July 1, 1983, of effluent limitations for point sources, other than publicly owned treatment works, which require the application of best available technology economically achievable which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants, as determined in accordance with regulations issued by the Administrator pursuant to section 304(b) to the Act.

Section 304(b) of the Act requires the Administrator to publish regulations providing guidelines for effluent limitations setting forth the degree of effluent reduction attainable through the application of the best practicable control technology currently available and the degree of effluent reduction attainable through the application of the best control measures and practices achievable including treatment techniques, process and procedure innovations, operating methods and other alternatives. The regulation proposed herein sets forth effluent limitations and guidelines, pursuant to sections 301 and 304(b) of the Act, for the fish meal processing subcategory (Subpart O), Alaskan hand-butchered salmon processing subcategory (Subpart P), Alaskan mechanized salmon processing subcategory (Subpart Q), West Coast hand-butchered salmon processing subcategory (Subpart R), West Coast mechanized salmon processing subcategory (Subpart S), Alaskan bottom fish processing subcategory (Subpart T), non-Alaskan conventional bottom fish processing subcategory (Subpart U), non-Alaskan mechanized bottom fish processing subcategory (Subpart V),

hand-shucked clam processing subcategory (Subpart W), mechanized clam processing subcategory (Subpart X), Pacific Coast hand-shucked oyster processing subcategory (Subpart Y), Atlantic and Gulf Coast hand-shucked oyster processing subcategory (Subpart Z), steamed/canned oyster processing subcategory (Subpart AA), sardine processing subcategory (Subpart AB), Alaskan scallop processing subcategory (Subpart AC), non-Alaskan scallop processing subcategory (Subpart AD), Alaskan herring fillet processing subcategory (Subpart AE), non-Alaskan herring fillet processing subcategory (Subpart AF), and abalone processing subcategory (Subpart AG) of the canned and preserved seafood processing point source category.

Section 304(c) of the Act requires the Administrator to issue to the States and appropriate water pollution control agencies information on the processes, procedures or operating methods which result in the elimination or reduction of the discharge of pollutants to implement standards of performance under section 306 of the Act. The report or "Development Document" referred to below provides, pursuant to section 304(c) of the Act, information on such processes, procedures or operating methods.

Section 306 of the Act requires the achievement by new sources of a Federal standard of performance providing for the control of the discharge of pollutants which reflects the greatest degree of effluent reduction which the Administrator determines to be achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants. Section 307(c) of the Act requires the Administrator to promulgate pretreatment standards for new sources at the same time that standards of performance for new sources are promulgated pursuant to section 306. Section 307(b) of the Act requires the establishment of pretreatment standards for pollutants introduced into publicly owned treatment works and 40 CFR 128 establishes that the Agency will propose specific pretreatment standards at the time effluent limitations are established for point source discharges. In another section of the FEDERAL REGISTER regulations are proposed in fulfillment of these requirements.

(b) SUMMARY AND BASIS OF INTERIM FINAL EFFLUENT LIMITATIONS GUIDELINES FOR EXISTING SOURCES AND PROPOSED STANDARDS OF PERFORMANCE AND PRETREATMENT STANDARDS FOR NEW SOURCES AND PRETREATMENT STANDARDS FOR EXISTING SOURCES

(1) General methodology.

The effluent limitations, guidelines and standards of performance set forth herein were developed in the following manner. The point source category was first studied for the purpose of determining whether separate limitations and standards are appropriate for different segments within the category. This analysis

included a determination of whether differences in raw material used, product produced, manufacturing process employed, age, size, waste water constituents and other factors require development of separate limitations and standards for different segments of the point source category. The raw waste characteristics for each such segment were then identified. This included an analysis of the source, flow and volume of water used in the process employed, the sources of waste and waste waters in the operation and the constituents of all waste water. The constituents of the waste waters which should be subject to effluent limitations were identified.

The control and treatment technologies existing within each segment were identified. This included an identification of each distinct control and treatment technology, including both in-plant and end-of-process technologies, which are existent or capable of being designed for each segment. It also included an identification of, in terms of the amount of constituents and the chemical, physical, and biological characteristics of pollutants, the effluent level resulting from the application of each of the technologies. The problems, limitations and reliability of each treatment and control technology were also identified. In addition, the non-water quality environmental impact, such as the effects of the application of such technologies upon other pollution problems, including air, solid waste, and noise were identified. The energy requirements of each control and treatment technology were determined as well as the cost of the application of such technologies.

The information, as outlined above, was then evaluated in order to determine what levels of technology constitute the "best practicable control technology currently available," "best available technology economically achievable" and the "best available demonstrated control technology, processes, operating methods, or other alternatives." In identifying such technologies, various factors were considered. These included the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application, 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.

The data upon which the above analysis was performed included EPA permit applications, EPA sampling and inspections, consultant reports, and industry submissions.

(2) Summary of conclusions with respect to the fish meal processing subcategory (Subpart O), Alaskan hand-butchered salmon processing subcategory (Subpart P), Alaskan mechanized salmon processing subcategory (Subpart Q), West Coast hand-butchered salmon processing subcategory (Subpart R), West Coast mechanized salmon processing subcategory (Subpart S), Alaskan bottom fish processing subcategory (Subpart T),

non-Alaskan conventional bottom fish processing subcategory (Subpart U), non-Alaskan mechanized bottom fish processing subcategory (Subpart V), hand-shucked clam processing subcategory (Subpart W), mechanized clam processing subcategory (Subpart X), Pacific Coast hand-shucked oyster processing subcategory (Subpart Y), Atlantic and Gulf Coast hand-shucked oyster processing subcategory (Subpart Z), steamed/canned oyster processing subcategory (Subpart AA), sardine processing subcategory (Subpart AB), Alaskan scallop processing subcategory (Subpart AC), non-Alaskan scallop processing subcategory (Subpart AD), Alaskan herring fillet processing subcategory (Subpart AE), non-Alaskan herring fillet processing subcategory (Subpart AF), and abalone processing subcategory (Subpart AG) of the canned and preserved seafood processing point source category:

(1) Categorization. For the purpose of studying waste treatment and proposing effluent limitations, the fish meal, salmon, bottom fish, clam, oyster, sardine, scallop, herring and abalone segments of the canned and preserved seafood processing category were divided into 19 discrete subcategories which were based on the form and quality of finished product; manufacturing processes and sub-processes utilized; waste water characteristics (particularly water consumption, total suspended solids, BOD<sub>5</sub>, and grease and oil); geographical location; and production capacity of plants as outlined in the report entitled, "Development Document for Proposed Effluent Limitations Guidelines and New Source Performance Standards for the Fish Meal, Salmon, Bottom Fish, Clam, Oyster, Sardine, Scallop, Herring and Abalone Segments of the Canned and Preserved Seafood Processing Industry." Several other factors, such as variability in raw product supply and production, condition of raw product on delivery to the processing plant, variety of species being processed, harvesting method, degree of pre-processing, age of plant, water availability, and amenability of waste to treatment were also considered. It was determined that these factors were highly correlated with one or more of the foregoing factors. Consideration of the economic impact of the proposed effluent limitations required provisions to be made in several subcategories to account for the size of the processing facility. Provisions have been established to account for differences due to processing plant locations in Alaska. The isolated location of some Alaskan seafood processing plants eliminates almost all waste water treatment alternatives because of undependable access to ocean, land, or commercial transportation during extended severe sea or weather conditions, and the high costs of eliminating the engineering obstacles due to adverse climatic and geologic conditions.

(1) Subpart O—Fish Meal Processing Subcategory: This subpart is limited to the major portion of the fish meal processing industry which encompasses the reduction of menhaden and anchovy to

meal, oil and solubles. The menhaden processing industry is located predominantly on the Gulf and Atlantic Coasts, whereas the anchovy processing industry is located on the West Coast.

(2) Subpart P—Alaskan Hand-Butchered Salmon Processing Subcategory: This subpart is limited to hand-butchered fresh/frozen and canned salmon processing in Alaska. Because of short seasons (one to two months) and the large volume of fish to be processed, the Alaska salmon plants are typically larger and operate longer hours than salmon plants in the contiguous states. Moreover, geographical differences based on considerations of climate, topography, relative isolation of the processing plants in Alaska, land and water availability and soil conditions further justify a distinction between Alaskan operations and those in the contiguous states.

Hand-butchered salmon processing results in significantly different waste characteristics and volumes when compared to mechanized salmon processing. For example, the water use per kilogram of salmon processed using mechanized butchering is 6 times the water use of the hand-butchered process; the total suspended solids ratio is about 15 times greater; and the 5-day biochemical oxygen demand (BOD<sub>5</sub>) approaches 25 times that of the hand-butchered salmon process. A provision has been established to account for differences due to processing plant locations in Alaska. The isolated location of some Alaskan seafood processing plants, compared to those in processing or population centers, eliminates almost all waste water treatment alternatives because of undependable access to ocean, land, or commercial transportation disposal alternatives during extended severe sea or weather conditions, and the high costs of eliminating the engineering obstacles due to adverse climatic and geologic conditions. However, those plants located in population or processing centers have access to more reliable, cost-effective alternatives such as solids recovery techniques or other forms of solids disposal such as barging.

(3) Subpart Q—Alaskan Mechanized Salmon Processing Subcategory: Mechanized butchering of salmon, as discussed above, causes significant differences in waste water characteristics and volumes when compared to the hand-butchered salmon operation.

Geographical differences such as those discussed in the previous section justify a distinction between Alaskan operations and those in the contiguous states.

Again, a provision of the effluent limitations accounts for differences in plant locations for isolated Alaskan plants as opposed to plants in a population or processing center.

(4) Subpart R—West Coast Hand-Butchered Salmon Processing Subcategory: The West Coast hand-butchered salmon processing industry is similar to the Alaskan industry in terms of processing technology and waste water characteristics. However, geographical differences such as those listed previously justify a distinction between Alaskan

processing and processing in the contiguous states.

(5) Subpart S—West Coast Mechanized Salmon Processing Subcategory: The West Coast mechanized salmon processing industry is similar to the Alaskan industry in terms of processing technology and waste water characteristics. However, geographical differences such as those listed previously justify a distinction between Alaskan processing and processing in the contiguous states.

(6) Subpart T—Alaskan Bottom Fish Processing Subcategory: This subpart is limited to conventional processing, in Alaska, of bottom fish such as halibut. A conventional process is defined as one in which the unit operations are carried out essentially by hand and with a relatively low water volume. Geographical differences such as those listed previously justify a distinction between Alaskan processing and processing in the contiguous states.

Again, a provision of the effluent limitations accounts for differences in plant locations for isolated Alaskan plants as opposed to plants in a population or processing center.

(7) Subpart U—Non-Alaskan Conventional Bottom Fish Processing Subcategory: This subpart is limited to conventional bottom fish processing in the contiguous states. A conventional process is defined as one in which the unit operations are carried out essentially by hand and with a relatively low water volume. Significant differences in waste water characteristics exist between this subcategory and the non-Alaskan mechanized bottom fish processing subcategory. For example, the mechanized bottom fish process BOD<sub>5</sub> is nearly 4 times that of the conventional bottom fish, the mechanized bottom fish total suspended solids is about 7 times as high as the conventional bottom fish, and the water use is approximately 2.5 times as high as the conventional bottom fish process.

(8) Subpart V—Non-Alaskan Mechanized Bottom Fish Subcategory: The Mechanized non-Alaskan bottom fish processing industry utilizes machines for many of the unit operations such as rinsing, descaling, skinning and butchering. As noted previously, significant differences in waste water characteristics exist between mechanized and conventional bottom fish processing.

(9) Subpart W—Hand-Shucked Clam Processing Subcategory: The majority of the clam harvest, approximately 90 percent, occurs in the mid-Atlantic States with the New England States accounting for the major portion of the remainder. The hand-shucked clam processing plants tend to be small operations in comparison to mechanized processing plants. The hand-shucked clam operation is characterized by significantly lower flow and BOD<sub>5</sub> ratios. The water use for the hand-shucked operations is approximately 25 percent of the water use for the mechanized clam operation; the BOD<sub>5</sub> is about 40 percent of the mechanized clam processing BOD<sub>5</sub>.

(10) Subpart X—Mechanized Clam Processing Subcategory: The mechanized

clam processing plants tend to be large operations in comparison to the hand-shucked clam processing facilities. The hand shucking operations generally use a hot water cooker before removing the clam from the shell. The mechanical operations generally use a steam cooker or a shucking furnace prior to separating the meat in a brine flotation tank. As discussed previously, significant differences in waste water characteristics exist between mechanized and hand-shucked clam processing.

(11) Subpart Y—Pacific Coast Hand-Shucked Oyster Processing Subcategory: This subpart is limited to hand-shucked oyster processing facilities which utilize oysters harvested off the Pacific Coast. As noted in the next section, significant differences in waste water characteristics exist between Pacific Coast and Atlantic and Gulf Coast hand-shucked oyster processing.

(12) Subpart Z—Atlantic and Gulf Coast Hand-Shucked Oyster Processing Subcategory: Processing of the Atlantic and Gulf Coast oysters is accomplished using either manual or mechanical methods, although plants utilizing manual operations are more prevalent. Manual or hand-shucked operations are relatively small in size in comparison to mechanized operations. This subpart is limited to the Atlantic and Gulf Coast hand-shucked oyster operations because of the differences in waste characteristics in comparison to the Pacific Coast hand-shucked oyster operations. The higher waste load of the Pacific Coast Oyster is attributable to the fact that the Pacific Coast species is larger and tends to break up easier during handling. For example, the total suspended solids and oil and grease loadings of the Pacific oyster are about 2.5 times that of the Atlantic oyster, and the BOD<sub>5</sub> loading is about 1.6 times the Atlantic oyster.

(13) Subpart AA—Steamed/Canned Oyster Processing Subcategory: The steam/canned oyster processor first mechanically shucks the oysters to jar the shells far enough apart to allow steam to enter during cooking. After steam cooking, the meat is separated using brine flotation tanks, washed and canned. Unlike the effluent characteristics of the hand-shucked oyster processes, there is no significant difference between the characteristics of Pacific Coast steamed/canned oyster process effluents when compared to those of the East Coast steamed/canned oyster process. Therefore, this subcategory covers both geographic regions.

(14) Subpart AB—Sardine Processing Subcategory: This subpart is limited to the canning of sardines or sea herring substituted for sardines. The sardine canning process is essentially the same from plant to plant and is located in one geographic region of New England.

(15) Subpart AC—Alaskan Scallop Processing Subcategory: This subpart is limited to the processing of scallops in Alaska. As noted previously, geographical differences based on consideration of climate; topography, relative isolation of the processing plants in Alaska, land and water availability and soil conditions

justify a distinction between Alaskan processing and processing in the contiguous states.

Moreover, a provision of the effluent limitations accounts for differences in plant locations for isolated Alaskan plants as opposed to plants in a population or processing center.

(16) Subpart AD—Non-Alaskan Scallop Processing Subcategory: The non-Alaskan bay and sea scallop processing industry in the contiguous states is similar to the Alaskan scallop processing industry in terms of processing technology. However, the geographical differences such as those listed in Subpart AC, above, justify a distinction between Alaskan processing and processing in the contiguous states.

(17) Subpart AE—Alaskan Herring Fillet Processing Subcategory: Sea herring fillets are produced on both the East and West Coasts, with the processing centers located in Southeastern Alaska and in New England. The sea herring filleting operation is a relatively recent development which utilizes filleting machines. Geographical differences based on considerations of climate, topography, relative isolation of the processing plants in Alaska, land and water availability and soil conditions justify a distinction between the Alaskan operations and those in the contiguous states.

Moreover, a provision of the effluent limitations accounts for differences in plant locations for isolated Alaskan plants as opposed to plants in a population or processing center.

(18) Subpart AF—Non-Alaskan Herring Fillet Processing Subcategory: The sea herring filleting process in the contiguous states is similar to the Alaskan operation in terms of processing technology and waste characteristics. However, the geographical differences listed previously justify a distinction between Alaskan processing and processing in the contiguous states.

(19) Subpart AG—Abalone Processing Subcategory: Abalone are found off the West Coast of the United States, ranging from Sitka, Alaska to Baja California. However, this subpart is limited to the commercially important species which are processed in the California area from Monterey to San Diego.

(ii) Waste Characteristics. Pollutants contained in waste waters resulting from seafood processing are measured by biochemical oxygen demand, chemical oxygen demand, settleable solids, total suspended solids, oil and grease, total Kjeldahl nitrogen (organic nitrogen and ammonia), nitrate, phosphorus, coliform bacteria, pH and temperature. Of the foregoing pollution parameters, biochemical oxygen demand, total suspended solids, and oil and grease have been selected as significant parameters for the establishment of effluent limitations. The pH parameter is included also as an effluent limitation which must fall within an acceptable range of values. The remaining parameters are so closely related to those selected as to be effectively controlled due to the specified

limitations, or are present at levels that are not significant.

(iii) Origin of waste water pollutants. Generally, waste water flows within the seafood processing industry originate at the receiving, pre-processing, evisceration, pre-cooling, picking and cleaning, shucking, preserving, canning, freezing, plant cleanup and by-product operations of the manufacturing process.

(iv) Treatment and Control Technology. Waste water treatment and control technologies have been studied for each subcategory of the industry to determine what is (a) the best practicable control technology currently available, (b) the best available technology economically achievable, and (c) the best available demonstrated control technology, processes, operating methods or other alternatives.

Present control and treatment practices are generally inadequate within the fish meal, salmon, bottom fish, clam, oyster, sardine, scallop, herring, and abalone processing segments of the canned and preserved seafood processing industry. Processors employ few, if any, waste water treatment facilities at the full scale plant operational level. Consequently, with the exception of screening and solids recovery, the majority of the waste water treatment alternatives are based on pilot plant studies, full scale demonstration treatment systems, transferable technology from the meat processing industry, municipal waste treatment systems, as well as other segments of the seafood and the food processing industry.

The available alternatives include in-plant controls such as water conservation and dry-capture of solids to minimize raw waste loads from processing. The end-of-process physical and chemical treatment technologies include screen, sedimentation, air flotation, and concentration. The end-of-process biological treatment alternatives include activated sludge, extended aeration, rotating biological contactors, high-rate trickling filters, stabilization ponds, and aerated lagoons.

The following discussion of treatment technology provides the basis for the economic impact analysis and the effluent limitations guidelines. This discussion does not preclude the selection of other waste water treatment alternatives which provide equivalent or better levels of treatment.

(1) Treatment for the fish meal processing subcategory:

Fish meal processing plants which utilize solubles recovery units provide a good example of exemplary plant operation in the seafood processing industry. Their "total resource" or raw material utilization eliminates almost all contact waste water and pollutant discharge except for a small amount of carry-over in the non-contact barometric condenser waters.

For plants with solubles recovery units, the best practicable control technology currently available involves "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using

spring-loaded hose nozzles, and by controlling leaks in the evaporator bodies and boil-over into condensate water. For plants without solubles recovery units, the best practicable control technology currently available consists of barging stickwater and recycled ball water to sea or to other facilities with solubles recovery units.

The best available technology economically achievable and the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consist of appropriate process design, including installation of solubles recovery units, to provide for by-product recovery and more efficient in-plant water use.

(2) Treatment for the Alaskan Hand-butchered salmon processing subcategory:

The best practicable control technology currently available for the non-remote processors, involves "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using spring-loaded hose nozzles, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent. The same level of technology for the remote processors consists of physical treatment of the pollutants to reduce particle sizes through the use of comminutors or grinders.

The best available technology economically achievable consists of appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent.

For the non-remote processors, the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consist of appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent. The same level of technology for the remote processors consists of physical treatment of the pollutants to reduce particle sizes through the use of comminutors or grinders.

(3) Treatment for the Alaskan mechanized salmon processing subcategory:

The best practicable control technology currently available (BPCTCA) for the non-remote processors, involves "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using spring-loaded hose nozzles, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent. BPCTCA for the remote processors consists of physical treatment of the pollutants through the use of comminutors or grinders to reduce particle sizes.

For the non-remote Alaskan processors the best available technology eco-

nomically achievable consists of appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent prior to dissolved air flotation. For the remote Alaskan processors, the best available technology economically achievable consists of appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent.

For the non-remote Alaskan processors the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consist of appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent. For the remote Alaskan processors, the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consist of physical treatment of the pollutants through the use of comminutors or grinders to reduce particle sizes.

(4) Treatment for the West Coast hand-butchered salmon processing subcategory:

The best practicable control technology currently available involves "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using spring-loaded hose nozzles, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent.

The best available technology economically achievable and the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consist of appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water, by-product recovery or ultimate disposal of solids, and treatment by dissolved air flotation in addition to screening.

(5) Treatment for the West Coast mechanized salmon processing subcategory:

The best practicable control technology currently available involves "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using spring-loaded hose nozzles, by-product recovery or ultimate disposal of solids, and treatment of the waste water effluent by dissolved air flotation in addition to screening.

The best available technology economically achievable and the best avail-

able demonstrated control technology, processes, operating methods or other alternatives for new sources consist of, in addition to the aforementioned treatment, appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water.

(6) Treatment for the Alaskan bottom fish processing subcategory:

The best practicable control technology currently available (BPCTCA) for the non-remote processors, involves "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using spring-loaded hose nozzles, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent. BPCTCA for the remote processors consists of physical treatment of the pollutants to reduce particle sizes through the use of comminutors or grinders.

The best available technology economically achievable consists of appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent.

For the non-remote processors, the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consists of appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent. The same level of technology for the remote processors consists of physical treatment of the pollutants to reduce particle sizes through the use of comminutors or grinders.

(7) Treatment for the non-Alaskan conventional bottom fish processing subcategory:

The best practicable control technology currently available involves "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using spring-loaded hose nozzles, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent.

The best available technology economically achievable and the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consist of the aforementioned treatment technology in addition to aerated lagoon systems and appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water.

(8) Treatment for the non-Alaskan mechanized bottom fish processing subcategory:

The best practicable control technology currently available involves "good housekeeping" practices which are con-

sidered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using spring-loaded hose nozzles, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent.

The best available technology economically achievable and the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consist of the aforementioned treatment technology in addition to dissolved air flotation systems and appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water.

(9) Treatment for the hand-shucked clam processing subcategory:

The best practicable control technology currently available involves "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using spring-loaded hose nozzles, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent.

The best available technology economically achievable and the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consist of the aforementioned treatment technology and appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water.

(10) Treatment for the mechanized clam processing subcategory:

The best practicable control technology currently available involves "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using spring-loaded hose nozzles, by-product recovery or ultimate disposal of solids, and treatment of the waste water effluent by screening.

The best available technology economically achievable and the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consist of the aforementioned treatment technology and appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water, and aerated lagoon systems in addition to the aforementioned treatment technology.

(11) Treatment for the Pacific Coast hand-shucked oyster processing subcategory:

The best practicable control technology currently available involves "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using spring-loaded hose nozzles, by-product recovery or ultimate disposal of

solids, and treatment of the waste water effluent by screening.

The best available technology economically achievable and the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consist of the aforementioned treatment technology and appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water, and extended aeration systems in addition to the aforementioned treatment technology.

(12) Treatment for the Atlantic and Gulf Coast hand-shucked oyster processing subcategory:

The best practicable control technology currently available involves "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using spring-loaded hose nozzles, by-product recovery or ultimate disposal of solids, and treatment of the waste water effluent by screening.

The best available technology economically achievable and the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consist of the aforementioned treatment technology and appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water, and extended aeration systems in addition to the aforementioned treatment technology.

(13) Treatment for the steamed/canned oyster processing subcategory:

The best practicable control technology currently available involves "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using spring-loaded hose nozzles, by-product recovery or ultimate disposal of solids, and treatment of the waste water effluent by screening.

The best available technology economically achievable and the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consist of the aforementioned treatment technology and appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water, and aerated lagoon systems in addition to the aforementioned treatment technology.

(14) Treatment for the sardine processing subcategory:

The best practicable control technology currently available involves "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using spring-loaded hose nozzles, by-product recovery or ultimate disposal of solids, treatment of the pre-cook water through oil skimming and screening, and

treatment of all other process waste water by screening.

The best available technology economically achievable and the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consist of the aforementioned treatment technology with additional treatment of the pre-cook water and can wash water by dissolved air flotation, and appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water.

(15) Treatment for the Alaskan scallop processing subcategory:

The best practicable control technology currently available (BPCTCA) for the non-remote processors, involves "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using spring-loaded hose nozzles, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent. BPCTCA for the remote processors consists of physical treatment of the pollutants to reduce particle sizes through the use of comminutors or grinders.

The best available technology economically achievable consists of appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent.

For the non-remote processors, the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consists of appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent. The same level of technology for the remote processors consists of physical treatment of the pollutants to reduce particle sizes through the use of comminutors or grinders.

(16) Treatment for the non-Alaskan scallop processing subcategory:

The best practicable control technology currently available involves "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using spring-loaded hose nozzles, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent.

The best available technology economically achievable and the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consist of the aforementioned treatment technology and appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water.

(17) Treatment for the Alaskan herring fillet processing subcategory:

The best practicable control technology currently available (BPCTCA) for the non-remote processors, involves "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using spring-loaded hose nozzles, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent. BPCTCA for the remote processors consists of physical treatment of the pollutants to reduce particle sizes through the use of comminutors or grinders.

For the remote processors, the best available technology economically achievable consists of appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent; for the non-remote processors, the effluent limitations are based on dissolved air flotation in addition to the aforementioned technology.

For the non-remote Alaskan processors the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consists of appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water, by-product recovery or ultimate disposal of solids, and screening of the waste water effluent. For the remote Alaskan processors, the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consists of physical treatment of the pollutants through the use of comminutors or grinders to reduce particle sizes.

(18) Treatment for the non-Alaskan herring fillet processing subcategory:

The best practicable control technology currently available involves "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using spring-loaded hose nozzles, by-product recovery or ultimate disposal of solids, and treatment of the waste water effluent by screening.

The best available technology economically achievable and the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consists of dissolved air flotation in addition to the aforementioned treatment technology and appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water.

(19) Treatment for the abalone processing subcategory:

The best practicable control technology currently available involves "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning

off faucets and hoses when not in use or using spring-loaded hose nozzles, by-product recovery or ultimate disposal of solids, and treatment of the waste water effluent by screening.

The best available technology economically achievable and the best available demonstrated control technology, processes, operating methods or other alternatives for new sources consist of the aforementioned treatment technology and appropriate process design to provide more efficient in-plant water use which reduces leaching of solubles and entrainment of solids in the contact process water.

Solid Waste Control: Solids currently being wasted in many plants can often be reclaimed in the form of protein foods, supplementary additives, and non-edible products, depending on the particular raw material. Solids from the following sources can be economically processed to yield protein foods, supplementary additives, or non-edible products.

a. Carcasses, frames and trimmings from filleting operations.

b. Ground fish too small to economically fillet.

c. Trimmings portions from butchering operation normally not included in the primary end product.

d. Whole or portions of industrial fish not suitable for human consumption.

e. Trimmings and waste portions from frozen fish, fish blocks, or other forms of seafood that are being trimmed or processed in the frozen state.

f. Frozen sawdust from sawing frozen fish into steaks or other products.

g. Fresh or frozen shrimp too small for peeling.

h. Fresh or frozen waste portions from shrimp cleaning and peeling operations.

i. Dark meat fish that cannot be sold for fillets but that can be added to extruded products in some predetermined percentage.

j. Waste from butchering after pre-cooling.

k. Shrimp, crab and other shell containing meat after the primary extraction process.

l. Combined solids reclaimed from effluent streams after screening.

m. Solids, reclaimed from effluent streams by flocculation, precipitation or other techniques.

n. Crab and shrimp shell residues from processing operations.

A very high degree of product recovery is practiced by industries in locations where solubles and meal plants are available. The pet food, animal food and bait industries also use a considerable amount of solids from some industries. Where such facilities do not exist, alternative methods of solids disposal must be considered, such as incineration, sanitary landfill and ocean disposal.

Incineration of seafood solids wastes has not been tried in most fish industries. However, incineration wastes beneficial nutrients while leaving an ash which requires ultimate disposal. Fuel costs are also high and air pollution control equipment must be installed to minimize emissions.

Sanitary landfills are most suitable for stabilized (digested) sludges and ash. In some regions, disposal of seafood waste solids in a public landfill is unlawful. Where allowed and where land is available, private landfill may be a practical method of ultimate disposal. Land application of unstabilized putrescible solids as a nutrient source may be impractical because of the nuisance odor conditions which may result. The application of stabilized sludges as soil conditioners should be feasible in many locations.

The practicality of landfill or surface land disposal is dependent upon both the absence of a solids reduction facility, and the presence of a suitable disposal site. The nutritive value of the solids indicates that such methods are among the least cost-efficient currently available.

Nevertheless, best practicable control technology and best available control technology as they are known today may require disposal of the pollutants removed from waste waters in this industry in the form of solid wastes and liquid concentrates if they are not recovered as by-products. In most cases these are non-hazardous substances requiring only minimal custodial care. However, some constituents may be hazardous and may require special consideration. In order to ensure long term protection of the environment from these hazardous or harmful constituents, special consideration of disposal sites must be made. All landfill sites where such hazardous wastes are disposed should be selected so as to prevent horizontal and vertical migration of these contaminants to ground or surface waters. In cases where geologic conditions may not reasonably ensure this, adequate legal and mechanical precautions (e.g. impervious liners) should be taken to ensure long term protection to the environment from hazardous materials. Where appropriate; the location of solid hazardous materials disposal sites should be permanently recorded in the appropriate office of legal jurisdiction.

In addition to placement in or on the land and dispersal in the atmosphere (after incineration), the third (and only remaining) ultimate disposal alternative is dispersion in the waters. Ocean disposal of fish wastes does not subject the marine environment to the potential hazards of toxicity and pathogens associated with the dumping of human sewage sludges, municipal refuse and many industrial wastes. The disposal of seafood wastes in deep water can be a practical and possibly beneficial method of ultimate disposal.

(v) Cost estimates for control of waste water pollutants.

The cost associated with the control and treatment technologies have been considered in an economic impact analysis discussed in (vii) below. The costs for in-plant controls are largely those associated with capital investment for process and equipment modifications discussed in detail in Section VII and VIII of the Development Document. Po-

tential realization of profits obtained from product loss reduction, by-product recovery, and reduced treatment costs may well result in a net gain to the processor.

The costs associated with end-of-pipe treatment include amortization of capital expenditures over a ten-year period, debt servicing, and operation and maintenance.

Self-monitoring costs are not included because historically the seafood industry has not been required to collect frequent self-monitoring samples.

(vi) Energy requirements and non-water quality environmental impacts.

The energy requirements associated with the control and treatment technologies have been considered. The estimated energy consumption of the recommended technologies is discussed and listed in Section VIII of the Development Document. The added energy requirements associated with the operation of the treatment facilities are expected to constitute only a small fraction of total plant energy consumption.

The maintenance of air quality, in terms of particulates, will be unaffected by the recommended waste water treatment technologies. Odor from landfills can be a problem, and from lagoons and oxidation ponds when not operated or maintained properly. However, covers or enclosures can be used in some cases if a localized problem exists.

Principal noise sources at treatment facilities are mechanical aerators, air compressors, and pumps. By running air compressors for diffused air systems below their rated critical speed and by providing inlet and exhaust silencers, noise effects can be combated effectively. In no proposed installation would noise levels exceed the guidelines established in the Occupational Safety and Health Standards of 1972.

(vii) Economic impact analysis.

The economic impact of the internal and external costs of the effluent limitations guidelines contained herein for the canned and preserved seafood processing industry is considered to be at an acceptable level. The internal costs are defined as investment and annual cost (operating costs plus the cost of capital and depreciation) for a typical plant. The total internal costs are the total investment and total annual cost for all plants in the industry. The total internal cost of the 1977 guidelines is \$6.1 million investment with \$1.3 million annual cost. The 1983 standards will require an additional \$8.2 million investment and in additional \$1.7 million annually. The required investment and annual costs for the 1977, 1983, and New Source standards appear to post no significant industry-wide problems.

External cost deals basically with the assessment of the economic impact of the internal costs discussed above in terms of price increases, production curtailments or plant closures, resultant unemployment, community and regional impacts, international trade, and future industry growth. The proposed effluent limitations will not significantly affect the

economic viability of the industry. The proposed limitations for 1977 will have a minor effect on prices as price increases generally in the range of 0.3 to 0.5 percent are projected. Although price increases in this industry will, of course, be affected by foreign competition, the generally small magnitude of the projected price increases is not expected to cause any important international trade effects. A number of small plants are projected to be adversely affected by these guidelines, but the domestic industry capacity is not expected to be affected by the potential closure of these particular small plants.

Only the Alaskan hand-butchered (fresh-frozen) salmon processing segment is of concern with twelve out of 31 exclusive plants possibly threatened economically by the 1977 interim-final guidelines. There are strong indications that this projected impact is overstated because of three factors: a) overestimation of actual treatment costs for small processors, b) overestimation of the actual number of small plants, and c) underestimation of the number of plants with (or soon to have) best practicable control technology in place. The Agency is reevaluating the economic impact analysis projections before issuing final regulations.

The 1983 standards are projected to result in price increases typically in the range 0.5 to 1.5 percent (including the 1977 increase). An additional number of generally small plants are projected to be adversely affected by these 1983 guidelines, but, again, the domestic industry capacity is not anticipated to be affected by the potential closure of these small plants. No significant international trade effects of the 1983 guidelines are projected.

The report entitled "Development Document for Interim Final Effluent Limitations Guidelines and Proposed New Source Performance Standards for the Fish Meal, Salmon, Bottom Fish, Clam, Oyster, Sardine, Scallop, Herring, and Abalone Segment of the Canned and Preserved Seafood Processing Point Source Category" details the analysis undertaken in support of the interim final regulation set forth herein and is available for inspection in the EPA Freedom of Information Center, Room 204, West Tower, Waterside Mall, Washington, D.C., at all EPA regional offices, and at State water pollution control offices. A supplementary analysis prepared for EPA of the possible economic effects of the regulation is also available for inspection at these locations. Copies of both of these documents are being sent to persons or institutions affected by the regulation, or who have placed themselves on a mailing list for this purpose (see EPA's Advance Notice of Public Review Procedures, 38 F.R. 21202, August 6, 1973). An additional limited number of copies of both reports are available. Persons wishing to obtain a copy may write the EPA Office of Public Affairs, Environmental Protection Agency Washington, D.C. 20460, Attention: Ms. Ruth Brown, A-107.

When this regulation is promulgated in final rather than interim form, revised copies of the Development Document will be available from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Copies of the Economic Analysis will be available through the National Technical Information Service, Springfield, Virginia, 22151.

#### (C) SUMMARY OF PUBLIC PARTICIPATION

Prior to this publication, the agencies and groups listed below were consulted and given an opportunity to participate in the development of effluent limitations, guidelines and standards for the canned and preserved seafood processing category. All participating agencies have been informed of project developments. An initial draft of the Development Document was sent to all participants and comments were solicited on that report. The following are the principal agencies and groups consulted: (1) Effluent Standards and Water Quality Information Advisory Committee (established under section 515 of the Act); (2) all State and U.S. Territory Pollution Control Agencies; (3) the National Marine Fisheries Service, U.S. Department of Commerce; (4) U.S. Department of the Interior; (5) U.S. Department of Health, Education, and Welfare; (6) the Water Resources Council; (7) the American Society of Mechanical Engineers; (8) the American Frozen Food Institute; (9) the National Cannery Association; (10) the National Fisheries Association; (11) Chesapeake Bay Seafood Industries, Association, Inc.; (12) The Conservation Foundation; (13) Environmental Defense Fund, Inc.; (14) Natural Resources Defense Council; (15) The American Society of Civil Engineers; (16) Water Pollution Control Federation; (17) National Wildlife Federation; (18) U.S. Department of Agriculture; (19) Virginia Seafood Council; (20) The National Fish Meal and Oil Association; (21) Maine Sardine Council; (22) Shellfish Institute of North America; (23) University of Maryland; (24) Natural Resources Institute, Seafood Processing Laboratory; (25) Kodiak Seafood Processors Association; and (26) Massachusetts Seafood Council.

The following responded with comments: (1) Virginia Seafood Council; (2) Maine Department of Environmental Protection; (3) Hawaii Department of Health; (4) United States Water Resources Council; (5) Government of American Samoa; (6) The National Fish Meal and Oil Association; (7) California State Water Resources Control Board; (8) Maine Sardine Council; (9) Shellfish Institute of North America; (10) State of Washington, Department of Ecology; (11) National Cannery Association; (12) American Institute of Chemical Engineers, Puget Sound Section; (13) Virginia State Water Control Board; (14) National Marine Fisheries Service; (15) U.S. Food and Drug Administration; and (16) U.S. Department of the Interior.

Numerous comments were in many respects virtually identical to those received in response to the proposed regulations for the catfish, crab, shrimp, and tuna segment of the canned and preserved seafood processing industry (39 FR 4708). The Agency's response to them appeared in the subsequent promulgated regulations for the catfish, crab, shrimp and tuna processing segment (39 FR 23134). However, for ease of reference these comments and responses are included below.

The primary issues raised in the development of the interim final effluent limitations and guidelines and the treatment of these issues herein are as follows:

(1) A number of commenters feel that EPA has failed to adequately justify treatment of all seafood process wastes prior to their return to the ocean environment because fish waste provides nutrients to the receiving water ecosystem.

The disposal of seafood processing waste waters in limited areas, frequently estuaries or coastal areas, does affect the ecosystem of the receiving waters. Moreover, under the Act, it is not necessary that a showing be made regarding the effect of the pollutional discharge upon the quality of the receiving water on a case-by-case basis. Under sections 301, 304(b) and (c), 306(b) and (c), and 307 (c), the principal means of control is through the adoption of effluent limitations directly applicable to the discharge itself. The effluent limitations guidelines are to be based upon defined levels of technology which are specified in the Act itself. Nevertheless, effluent limitations derived from water quality standards are retained as a secondary means of control and will have their principal applicability in those instances where technology-based effluent limitations are not stringent enough to provide for the achievement of water quality standards.

Contrary to the assumption of many commenters, Water Quality Criteria are not established on an industry-by-industry basis, but rather on a pollutant parameter basis. Notice of publication for the "Proposed Criteria for Water Quality, Volume I" was contained in the October 26, 1973 FEDERAL REGISTER and the "Proposed Water Quality Information, Volume II," in the October 29, 1973 FEDERAL REGISTER. Information may be obtained from the Director, Water Quality Criteria Staff; Environmental Protection Agency; Waterside Mall East, Room 737, 401 M Street, S.W., Washington, D.C. 20460.

(2) A comment was made that the regulations and Development Document do not provide the means to determine subcategory classification for multi-product plants with respect to establishing effluent limitations.

A primary reason for establishing effluent limitations guidelines on the basis of production of raw material or final product, is to provide the means to consider the single product as well as the multi-product seafood processor without set-

ting separate guideline numbers for every possible combination of species and processing rates.

When a plant is subject to effluent limitations covering more than one subcategory, the plant's effluent limitation shall be the aggregate of the limitations applicable to the total production covered by each subcategory. For example, if a plant processes several species concurrently, then the plant's effluent limitation may be the sum of the multiple of the volume of each species (or final product) processed and the respective effluent limitation. If a plant processes several species in series, then the effluent limitation may be based on the subcategory classification of the individual species while it is being processed. In other words, the aggregate effluent limitation guideline number may vary as a function of the commodity mix at any particular point in time.

Section VII of the Development Document discusses a "conservation of mass" approach to evaluating the waste characteristics of the multi-product processing plant as it affects the selection of in-plant and end-of-pipe pollution control technology.

As forecast in the preamble of the promulgated regulations contained in the June 26, 1974, FEDERAL REGISTER (39 FR 23134), the Agency now expands the applicability of the effluent limitations to multi-product plants which were excluded from coverage.

The promulgated effluent limitations limited the guidelines to those plants processing any combination of catfish, crab, shrimp, or tuna providing that the total throughput of these commodities amounts to eighty percent or more of the plant's seasonal or yearly production. At the time of promulgation the Agency had not been able to determine satisfactorily the possible economic impact of extending the guidelines to cover all plants which process some percentage of these species but also process significant quantities of other species. However, the current economic impact analysis indicates that the promulgated regulations (39 FR 23134) and the interim final regulations contained herein may apply to any facility processing a commodity encompassed by the regulations without the need for a product-mix or percentage throughput constraint.

(3) Some commenters criticized as inadequate the data base upon which the raw waste loads and effluent reductions were calculated.

The Agency is well aware that the amount of information available on raw waste loadings and treatment efficiencies is less than that which would exist in ideal circumstances. However the historical data on expected raw waste loads is of diminished utility because of the variability due to sampling methods previously employed and the even smaller amount of data on treatment plant efficiencies is due to the generally inadequate level of treatment which has prevailed historically in the industry.

The time constraints imposed by the statutory deadlines precluded the Agency



from conducting an exhaustive sampling program. Nevertheless in the time available, the contractor (a recognized authority on waste management in the seafood processing industry) carried out the first national scale empirical study of the industry's waste characteristics and treatment. All samples were flow-proportioned, composite samples in order to reflect as accurately as possible the actual pollutant characteristics of the industry's effluent. The existing scientific literature was also reviewed but because of the variability referred to above, the results were less useful than EPA's own sampling program.

As far as the effluent limitations guidelines themselves are concerned, the effluent reductions expected are based predominantly upon: (1) the performance of systems now in operation in the industry; (2) the results of research demonstration projects; (3) Agency studies on seafood waste and on the results of other Federal agency programs (such as the National Marine Fisheries Service pilot plant studies of air flotation); and (4) the informed advice of consultants on treatment of seafood processing wastes. The effluent reductions obtained by specific treatment technologies as applied to waste water with similar pollutant characteristics in other food processing industries were also considered in developing the effluent limitation guidelines.

(4) A number of commenters suggested that the technology specified as best available technology economically achievable had not been adequately demonstrated for this industrial category.

The Agency recognizes that the technology specified herein as best available technology economically achievable has not been demonstrated for every subcategory in day-to-day operations in this industrial category. In making the judgment as to whether or not the technology is "available," the Agency examined a wide range of information, including the use of the technology to treat similar wastes in other industrial categories, pilot plant and demonstration projects, and laboratory and other experimental data on various waste treatment processes. Based on such data and information, and the application of the Agency's best judgment, the technology specified herein was determined to constitute the best available technology economically achievable.

It is recognized that in some cases the industry must perform some of the pilot plant and other developmental work which will be necessary to bring the technology into full utilization. This does not, however, alter the Agency's judgment that the technology is "available," is "economically achievable" and can be brought on line in time to achieve full compliance by 1983, as required by the Act.

The technology which forms the basis for the effluent limitations guidelines is used only as a point of reference for available treatment systems. The industry may select alternative methods

as discussed in the Development Document to meet the effluent limitations.

(5) Some correspondents endorsed the proposal made to the Administrator by the Effluent Standards and Water Quality Information Advisory Committee that a significantly different approach be taken in the development of effluent guidelines generally.

The committee's proposal is under evaluation as a contribution toward future refinements of guidelines for some industries. The committee has indicated that their proposed methodology could not be developed in sufficient time to be available for the current phase of guideline promulgation, which is proceeding according to a court-ordered schedule. Its present state of development does not provide sufficient evidence to warrant the Agency's delaying issuance of any standard in hopes that an alternative approach might be preferable.

(6) One commenter suggests that, contrary to the provisions of the Act, in-plant process changes form the basis for both the 1977 and 1983 effluent limitations guidelines.

The 1977 effluent limitations guidelines are based on end-of-pipe treatment and "good housekeeping" practices which are considered normal practice within the seafood processing industry such as turning off faucets and hoses when not in use or using spring-loaded hose nozzles. The limitations do not reflect any significant in-plant equipment or process changes. The large variation in water usage for the same process configuration among different plants indicates that there is ample opportunity for the reduction of water usage without adversely affecting the quality of the product.

The emphasis in the Development Document on adequate in-plant control and process changes which substantially reduce the end-of-pipe waste load and flow as well as the associated waste treatment cost, is intended for those processors who recognize the possible cost trade-offs between end-of-pipe treatment and in-plant changes or recovery techniques.

The 1983 guidelines and new source standards include consideration of in-plant process changes to effect water use reductions, as provided by the Act.

(7) A number of commenters suggest that neither the effluent limitations guidelines nor the economic justification for mandatory installation of pollution control technology should be based on the recovery of by-products, because of fluctuating market potentials.

The technical and economic analyses were not based on by-product recovery techniques. The purpose of the by-product recovery discussion in the Development Document is to outline several of the major developments that are currently in use, ready for use, or will be available within the next few years.

(8) The suggestion was made that EPA should use the COD test instead of the BOD5 test because it is faster, easier and less expensive to run, and more reproducible than the BOD5 test.

The BOD5 test is widely used to determine the pollutional strength of domestic and industrial wastes in terms of the oxygen these wastes will require if discharged into natural watercourses in which aerobic conditions exist. Furthermore, current engineering practice utilizes BOD5 as a principal design parameter, especially for biological waste treatment systems.

The possibility of substituting the COD parameter for the BOD5 parameter was investigated during this study. The BOD5 and corresponding COD data from industrial fish, finfish, and shellfish waste waters were analyzed to determine if COD is an adequate predictor of BOD5 for any or all of these groups of seafood. The analysis presented in Section VI of the Development Document indicates that the COD parameter is not a reliable predictor of BOD5.

The relationship between COD and BOD5 before treatment is not necessarily the same after treatment. Therefore, the effluent limitations guidelines will include the BOD5 parameter, since insufficient information is available on the COD effluent levels after treatment.

(9) One commenter suggested that the effluent limitations should be modified to include a range of numbers for the BOD5, total suspended solids, and oil and grease parameters. The range should include that attainable by screening at one extreme and air flotation or its equivalent at the other.

The available data do not indicate significant differences attributable to age and size of plant and other factors that would justify further subcategorization of the industry or establishment of ranges of limitations.

The present guidelines take differences within the seafood processing industry into account through subcategorization, rather than by use of ranges of numbers to be varied at the discretion of the permit issuing authority.

Section 306 of the Act separates several broad industrial groups into 27 subgroups. For example, the food processing industry has been divided into the meat products and rendering, dairy products, canned and preserved fruits and vegetables, grain mills, canned and preserved seafood, and sugar processing categories. The canned and preserved seafood processing category has been further subdivided as given in the regulation promulgated on June 26, 1974 (39 FR 23134) into four segments (catfish, crab, shrimp and tuna) within which 14 subcategories have been established on the basis of such factors as size and location of plants, and types of products processed. The proposed limitations presented herein further subdivides the category into an additional 20 subcategories enumerated above.

(10) The comment was made that the practice of screening the raw waste waters with a 20-mesh Tyler sieve prior to laboratory analysis does not measure the real organic waste load of the untreated effluent. Therefore, EPA is in error by using this data for establishing further reductions through employment

of subsequent waste water treatment under commercial plant operating conditions. The samples should have been ground prior to analysis in order to measure the total BOD demand by the effluent in the environment even if it does require a long time for such biological degradation.

As discussed in the Development Document, the sampling effort was designed to identify the constituents of the waste waters which should be subject to effluent limitations and to minimize the complexity of reducing the effluent pollution to acceptable levels.

The practice of utilizing a 20-mesh Tyler sieve has been used in previous waste water characterization research in both the seafood and the fruits and vegetable fields. It serves to remove the larger solid particles (such as crab legs, some shrimp shell, fish parts, etc.) and thereby greatly reduce the resultant "scatter" of the data points. The method is especially valuable in developing a precise base-line value for each parameter from a limited number of samples.

The problem of collecting representative samples when large solid particles are contained in the effluent becomes rather complex without knowing the underlying frequency distribution of the number and size of the particles. Extremely large volumes of waste water would be necessary for a representative raw waste effluent sample. Because the basis for the minimum treatment effort included screening for most processors, data based on ground effluent samples would have no relationship to commonly accepted engineering design parameters.

(11) It was suggested that the Alaskan subcategories should have been further subdivided to account for the isolated plants which do not have dependable access to landfills or ocean barging in order to dispose of screened wastes by biologically degradable techniques or by dispersion over large areas through ocean disposal because of adverse climatic and geologic conditions.

After assessing the available information provisions have been established to account for differences due to seafood processing plant locations in Alaska.

There is substantial evidence that processors in isolated and remote areas of Alaska are at a comparative economic disadvantage to the processors located in population or processing centers regarding attempts to meet the proposed effluent limitations guidelines. The isolated location of some Alaskan seafood processing plants eliminates almost all waste water treatment alternatives because of undependable access to ocean, land, or commercial transportation disposal methods during extended severe sea or weather conditions, and the high costs of eliminating the engineering obstacles due to adverse climatic and geologic conditions. However, those plants located in population or processing centers have access to more reliable, cost-effective alternatives such as solids recovery techniques or other forms of solids disposal such as landfill or barging.

(12) The comment was made that the technology of dissolved air flotation cannot be transferred from one type of food processing or even fishery species to another. Moreover, EPA has not identified the degree of effluent reduction by best practicable control technology currently available from adequate plant and demonstration studies for the seafood subcategories.

A determination of the effluent limitations guidelines study was that the existing level of waste treatment throughout seafood processing industry was generally inadequate. With the exception of operations engaged in fish meal processing, the prevalent form of plant waste water treatment technology for the fish and seafood processing industry is screening or direct discharge.

EPA has reassessed the available data and consulted recognized seafood waste water treatment experts. The Agency has concluded that air flotation technology is currently available for the fish and seafood processing industry because of its use in other related industries with similar wastes and because of its current use in several segments of the seafood processing industry. Dissolved air flotation is an established technology for the seafood industry though not as yet in common practice. The Fisheries Research Board of Canada and the Fisheries Association of British Columbia designed and erected a full scale demonstration dissolved air flotation waste water treatment plant which accommodates salmon canning, herring roe recovery, and ground fish filleting effluents. Full scale dissolved air flotation systems have also been installed within the menhaden, sardine, and tuna processing industries. Pilot plant studies have been conducted on shrimp processing effluents in Alaska and Louisiana, and on crab processing effluents in Alaska. Section VII of the Development Document includes a discussion of dissolved air flotation technology and tables listing by species the degree of removal of various parameters attained by pilot plant and full scale air flotation systems. Appendices to the Development Document include a bibliography of air flotation studies for the seafood industry, a listing of sources on the application of air flotation technology to other related industries such as meat packing and poultry processing, and a list of waste water treatment equipment manufacturers that produce air flotation units.

(13) The criticism was made that there are no data which support the statement that dissolved air flotation operated as a physical system will achieve the reductions assumed in the draft Development Document.

EPA recognizes that almost all pilot plant and full-scale air flotation systems operating in the seafood industry rely on chemical addition and optimization to achieve the highest levels of pollution abatement or by-product recovery. The Agency expects the dissolved air flotation systems to include chemical addition. The capital cost estimates and operation and maintenance costs used in

the economic impact analysis for air flotation equipment include the costs for chemical addition for both the 1977 and 1983 estimates. However, optimization of dissolved air flotation performance is not required until 1983 because the technology is relatively new for most of the seafood processing industry and requires careful selection of chemicals and dosages, as well as skilled operation for optimum pollution abatement. Those 1977 guidelines which are based on dissolved air flotation reflect the Agency's best engineering assessment of the effluent reduction attainable by this technology without chemical optimization.

(14) One commenter suggested that adequate attention had not been given to the sludge disposal or recovery problems of the dissolved air flotation system.

Conventional methods of sludge handling and disposal are available and demonstrated to be effective. For example, the sludge from the Canadian dissolved air flotation system is presently being dewatered by centrifuging and recovered as a supplement to poultry feed. A conclusion of the "Draft Shrimp Canning Waste Treatment Study" (EPA Project S800 904) states that dewatering of dissolved air flotation sludge will be necessary for economical disposal. Centrifugation of the sludge was demonstrated to decrease the volume by 4:1 and increase the total solids dry weight by 2:1.

(15) A number of comments reflected concern that the effluent limitations guidelines should be applied on a net rather than a gross basis to allow for pollutants which may be present in the plant intake-water.

The effluent limitations guidelines have generally been developed on a gross or absolute basis. However, the Agency recognizes that in certain instances pollutants will be present in navigable waters which provide a plant's intake water supply in significant concentrations which may not be removed to the levels specified in the guidelines by the application of treatment technology contemplated by best practicable control currently available.

Accordingly, the Agency has developed amendments to its NPDES permit regulations (40 CFR Part 125) which specifies the situations in which the Regional Administrator may allow a credit for such pollutants. The proposed amendment appeared in the October 18, 1974, FEDERAL REGISTER (39 FR 37215).

(16) Many commenters stated that the summary "raw waste" data presented in the draft development document were too variable to be used as a basis for proposed effluent standards.

An examination of the method of calculation of the summary "raw waste" averages revealed that the logarithmic-normal frequency distribution provides a better fit of the data than the arithmetic-normal frequency distribution.

The observation that many of the arithmetic-normal, summary standard deviations exceeded fifty percent of the mean value, supports the notion that the data does not fit the arithmetic-normal distribution. The logarithmic-normal

distribution fits data which tends to skew toward the right, away from zero, which is the case with the plant summary data presented in the Development Document.

To further equalize the summary statistics, individual plant averages were weighted by the number of samples collected per plant and the individual plant temporal variances.

The effect of the logarithmic-normal statistical analysis raises some summary means, lowers others, and leaves other summary means relatively unchanged from the draft development document.

(17) One commenter feels it would be more equitable to base the oyster effluent limitations on the tonnage of raw product processed rather than the shucked weight of the oyster.

The effluent limitations guidelines are expressed in terms of the shucked weight of the oysters rather than the weight of the raw material as received at the plant because the relation of input shell weight to final product weight was too variable for accurate measurements. This is partially due to empty or loose shell in the raw material at the 14 plants sampled and the fact that accurate records were available for the shucked weights of the oysters rather than raw material weights because the shuckers are usually paid for the amount of shucked oyster produced.

The Agency believes this to be an equitable approach. For example, suppose that a plant produces two tons of shucked oysters from 25 tons of raw material with a total waste load of 100 pounds of BOD<sub>5</sub> for the day's production. Then the waste load expressed in terms of raw material is 4 lbs. of BOD<sub>5</sub> per ton of raw material; the identical waste load expressed in terms of final product is 50 lbs of BOD<sub>5</sub> per ton of product.

The Agency realizes that the oyster guidelines derived from raw waste load ratios based on product weight instead of raw material weight is inconsistent with other subcategories and therefore, during the comment period, requests data which could be used to establish a more accurate basis for shucked oyster production and effluent limitations.

(18) One commenter felt that the Gulf Coast oyster processors should be exempt from effluent limitations because the Gulf Coast oyster processing facilities were not among those specifically sampled.

As discussed in the development document, the Agency believes that the Gulf Coast oyster processors can be grouped with the East Coast oyster processors because the same species of oysters are processed and the same processing methods are utilized in both areas.

(19) Several commenters feel that industry expansion will be inhibited in remote areas of Alaska if the new source performance standards are based on screening instead of comminutors or grinders which provides the basis for the July 1, 1977, standards.

After reassessing the available information and comments submitted by in-

terested parties, the technology basis for new source performance standards was changed from screening to comminutors or grinders because it can be argued that the adverse climatic and geologic conditions of many isolated areas of Alaska eliminates almost all waste water treatment alternatives.

In addition, the agency proposes amendments to §§ 408.55, 408.75, and 408.105 of the promulgated effluent limitations and guidelines for existing sources and standards of performance and pretreatment standards for new sources for the canned and preserved seafood processing point source category (39 FR 23134) to reflect this change.

(20) Several commenters suggest that the cost of collecting self-monitoring samples should be an integral part of the economic analysis since it may have a significant impact on the small processing facilities.

Self-monitoring costs are not included because historically the small-to-medium sized plants in the seafood processing industry have not been required to collect frequent self-monitoring samples. In general, the sampling frequency has fallen within once every three to six months with no less than one sample per year. Assuming that such monitoring requirements will continue, the cost of monitoring for a typical plant is considered to be negligible for the economic impact analysis. However, the self-monitoring sampling frequency may increase for (a) large plants, (b) facilities affected by water quality criteria, or (c) plants with unique waste loads.

(21) Several commenters requested allowances within the hand-shucked oyster subcategories to accommodate possible processing changes which may be necessary to meet forthcoming Food and Drug Administration regulations.

Even though the Agency appreciates the fact that the raw waste loads may change as a result of future process alterations, the effluent limitations contained herein are based on waste loads resulting from current industry processing configurations. When the Food and Drug Administration promulgates regulations affecting the hand-shucked oyster processing subcategory, the Agency will reevaluate the effluent limitations. However, an individual processor may petition the permit issuing authority for an allowance in the waste load to account for such processing changes.

(22) Even though the regulations contained herein do not apply to non-traditional fishery resources or to new or experimental processes, one commenter is concerned that the new source performance standards will be extrapolated to new pilot or demonstration plants before adequate economic data materializes.

The Agency's interpretation of section 306(a)(2) of the Act does not consider a new seafood processing facility a "new source" if the processing facility is not covered by the regulations set forth in Part 408 of Title 40 of the Code of Federal Regulations. In developing effluent limitations for sources not covered by

guidelines the permit issuing authority would be expected to consider all available information of a technical and economic nature pertaining to the proposed facilities and not just simply extrapolate new source performance standards from categories covered by guidelines.

The Agency is subject to an order of the United States District Court for the District of Columbia entered in *Natural Resources Defense Council v Train et. al.* (Civ. No. 1609-73) which requires the promulgation of regulations for this industry category no later than January 3, 1975. This order also requires that such regulations become effective immediately upon publication. In addition, it is necessary to promulgate regulations establishing limitations on the discharge of pollutants from point sources in this category so that the process of issuing permits to individual dischargers under section 402 of the Act is not delayed.

It has not been practicable to develop and publish regulations for this category in proposed form, to provide a 30 day comment period, and to make any necessary revisions in light of the comments received within the time constraints imposed by the court order referred to above. Accordingly, the Agency has determined pursuant to 5 USC 553(b) that notice and comment on the interim final regulations would be impracticable and contrary to the public interest. Good cause is also found for these regulations to become effective on January 30, 1975.

Interested persons are encouraged to submit written comments. Comments should be submitted in triplicate to the EPA Office of Public Affairs, Environmental Protection Agency, Washington, D.C. 20460, Attention: Ms. Ruth Brown, A-107. Comments on all aspects of the regulation are solicited. In the event comments are in the nature of criticisms as to the adequacy of data which are available, or which may be relied upon by the Agency, comments should identify and, if possible, provide any additional data which may be available and should indicate why such data are essential to the amendment or modification of the regulation. In the event comments address the approach taken by the Agency in establishing an effluent limitation or guideline EPA solicits suggestions as to what alternative approach should be taken and why and how this alternative better satisfies the detailed requirements of sections 301 and 304(b) of the Act.

A copy of all public comments will be available for inspection and copying at the EPA Freedom of Information Center, Room 204, West Tower, Waterside Mall, 401 M Street SW., Washington, D.C. A copy of preliminary draft contractor reports, the Development Document and economic study referred to above, and certain supplementary materials supporting the study of the industry concerned will also be maintained at this location for public review and copying. The EPA information regulation, 40 CFR Part 2, provides that a

reasonable fee may be charged for copying.

All comments received on or before March 3, 1975 will be considered. Steps previously taken by the Environmental Protection Agency to facilitate public response within this time period are outlined in the advance notice concerning public review procedures published on August 6, 1973 (38 FR 21202). In the event that the final regulation differs substantially from the interim final regulation set forth herein the Agency will consider petitions for reconsideration of any permits issued in accordance with these interim final regulation.

In consideration of the foregoing, 40 CFR Part 408 is hereby amended as set forth below.

Dated: January 17, 1975.

Effective date: January 30, 1975.

RUSSELL E. TRAIN,  
Administrator.

Subpart A—the farm raised catfish processing subcategory is amended by revising § 408.10 to read as follows:

§ 408.10 Applicability; description of the farm raised catfish processing subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing of farm-raised catfish by existing facilities which process more than 1362 kg (3000 lbs) of raw material per day on any day during a calendar year and all new sources.

Subpart B—the conventional blue crab processing subcategory is amended by revising § 408.20 to read as follows:

§ 408.20 Applicability; description of the conventional blue crab processing subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing of blue crab in which manual picking or separation of crab meat from the shell is utilized. The effluent limitations contained in Subpart B are applicable to existing facilities processing more than 1362 kg (3000 lbs) of raw material per day on any day during a calendar year and all new sources.

Subpart C—the mechanized blue crab processing subcategory is amended by revising § 408.30 to read as follows:

§ 408.30 Applicability; description of the mechanized blue crab processing subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing of blue crab in which mechanical picking or separation of crab meat from the shell is utilized.

Subpart D—the non-remote Alaskan crab meat processing subcategory is amended by revising § 408.40 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 Subpart D are applicable to facilities located in population or processing centers including but not limited to Anchorage, Cordova, Juneau, Ketchikan, Kodiak, and Petersburg.

Subpart E—the remote Alaskan crab meat processing subcategory is amended by revising § 408.50 to read as follows:

§ 408.50 Applicability; description of the remote Alaskan crab meat processing subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing, in remote Alaska, of dungeness, tanner, and king crab meat. The effluent limitations contained in Subpart E are applicable to facilities not covered under Subpart D.

Subpart F—the non-remote Alaskan whole crab and crab section processing subcategory is amended by revising § 408.60 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 Subpart F are applicable to facilities located in population or processing centers including but not limited to Anchorage, Cordova, Juneau, Ketchikan, Kodiak, and Petersburg.

Subpart G—the remote Alaskan whole crab and crab section processing subcategory is amended by revising § 408.70 to read as follows:

§ 408.70 Applicability; description of the remote Alaskan whole crab and crab section processing subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing, in remote Alaska, of dungeness, tanner, and king whole crab and crab sections. The effluent limitations contained in Subpart G are applicable to facilities not covered under Subpart F.

Subpart H—the dungeness and tanner crab processing in the contiguous States subcategory is amended by revising § 408.80 to read as follows:

§ 408.80 Applicability; description of the dungeness and tanner crab processing in the contiguous States subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing of dungeness and tanner crab in the contiguous States.

Subpart I—the non-remote Alaskan shrimp processing subcategory is amended by revising § 408.90 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 Subpart I are applicable to facilities located in population or processing centers including but not limited to Anchorage, Cordova, Juneau, Ketchikan, Kodiak, and Petersburg.

Subpart J—the remote Alaskan shrimp processing subcategory is amended by revising § 408.100 to read as follows:

§ 408.100 Applicability; description of the remote Alaskan shrimp processing subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing of shrimp in remote Alaska. The effluent limitations contained in Subpart J are applicable to facilities not covered under Subpart I.

Subpart K—the northern shrimp processing in the contiguous States subcategory is amended by revising § 408.110 to read as follows:

§ 408.110 Applicability; description of the Northern shrimp processing in the contiguous States subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing of shrimp in the Northern contiguous States, including Washington, Oregon, California, Maine, New Hampshire, and Massachusetts. The effluent limitations contained in Subpart K are applicable to existing facilities processing more than 908 kg (2000 lbs) of raw material per day on any day during a calendar year and all new sources.

Subpart L—the southern non-breaded shrimp processing in the contiguous States subcategory is amended by revising § 408.120 to read as follows:

§ 408.120 Applicability; description of the Southern non-breaded shrimp processing in the contiguous States subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing of non-breaded shrimp in the Southern contiguous States, including North and South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas. The effluent limitations contained in Subpart L are applicable to existing facilities processing more than 908 kg (2000 lbs) of raw material per day on any day during a calendar year and all new sources.

Subpart M—the breaded shrimp processing in the contiguous States subcategory is amended by revising § 408.130 to read as follows:

§ 408.130 Applicability; description of the breaded shrimp processing in the contiguous States subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing of breaded shrimp in the contiguous States by existing facilities processing more than 908 kg (2000 lbs) of raw material per day on any day during a calendar year and all new sources.

Subpart N—the tuna processing subcategory is amended by revising § 408.140 to read as follows:

## RULES AND REGULATIONS

**§ 408.140 Applicability; description of the tuna processing subcategory.**

The provisions of this subpart are applicable to discharges resulting from the processing of tuna.

The following new subparts are added to 40 CFR Part 408:

**Subpart O—Fish Meal Processing Subcategory**

**Sec. 408.150** Applicability; description of the fish meal processing subcategory.

**408.151** Specialized definitions.

**408.152** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

**408.153** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart P—Alaskan Hand-Butchered Salmon Processing Subcategory**

**408.160** Applicability; description of the Alaskan hand-butchered salmon processing subcategory.

**408.161** Specialized definitions.

**408.162** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

**408.163** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart Q—Alaskan Mechanized Salmon Processing Subcategory**

**408.170** Applicability; description of the Alaskan mechanized salmon processing subcategory.

**408.171** Specialized definitions.

**408.172** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

**408.173** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart R—West Coast Hand-Butchered Salmon Processing Subcategory**

**408.180** Applicability; description of the West Coast hand-butchered salmon processing subcategory.

**408.181** Specialized definitions.

**408.182** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

**408.183** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart S—West Coast Mechanized Salmon Processing Subcategory**

**408.190** Applicability; description of the West Coast mechanized salmon processing subcategory.

**408.191** Specialized definitions.

**Sec. 408.192** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

**408.193** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart T—Alaskan Bottom Fish Processing Subcategory**

**408.200** Applicability; description of the Alaskan bottom fish processing subcategory.

**408.201** Specialized definitions.

**408.202** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

**408.203** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart U—Non-Alaskan Conventional Bottom Fish Processing Subcategory**

**408.210** Applicability; description of the non-Alaskan conventional bottom fish processing subcategory.

**408.211** Specialized definitions.

**408.212** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

**408.213** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart V—Non-Alaskan Mechanized Bottom Fish Processing Subcategory**

**408.220** Applicability; description of the non-Alaskan mechanized bottom fish processing subcategory.

**408.221** Specialized definitions.

**408.222** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

**408.223** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart W—Hand-Shucked Clam Processing Subcategory**

**408.230** Applicability; description of the hand-shucked clam processing subcategory.

**408.231** Specialized definitions.

**408.232** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

**408.233** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart X—Mechanized Clam Processing Subcategory**

**Sec. 408.240** Applicability; description of the mechanized clam processing subcategory.

**408.241** Specialized definitions.

**408.242** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

**408.243** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart Y—Pacific Coast Hand-Shucked Oyster Processing Subcategory**

**408.250** Applicability; description of the Pacific Coast hand-shucked oyster processing subcategory.

**408.251** Specialized definitions.

**408.252** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

**408.253** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart Z—Atlantic and Gulf Coast Hand-Shucked Oyster Processing Subcategory**

**408.260** Applicability; description of the Atlantic and Gulf Coast hand-shucked oyster processing subcategory.

**408.261** Specialized definitions.

**408.262** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

**408.263** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart AA—Steamed/Canned Oyster Processing Subcategory**

**408.270** Applicability; description of the steamed/canned oyster processing subcategory.

**408.271** Specialized definitions.

**408.272** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

**408.273** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart AB—Sardine Processing Subcategory**

**408.280** Applicability; description of the sardine processing subcategory.

**408.281** Specialized definitions.

**408.282** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

**408.283** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart AC—Alaskan Scallop Processing Subcategory**

- Sec. 408.290 Applicability; description of the Alaskan scallop processing subcategory.
- 408.291 Specialized definitions.
- 408.292 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 408.293 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart AD—Non-Alaskan Scallop Processing Subcategory**

- 408.300 Applicability; description of the non-Alaskan scallop processing subcategory.
- 408.301 Specialized definitions.
- 408.302 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 408.303 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart AE—Alaskan Herring Fillet Processing Subcategory**

- 408.310 Applicability; description of the Alaskan herring fillet processing subcategory.
- 408.311 Specialized definitions.
- 408.312 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 408.313 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart AF—Non-Alaskan Herring Fillet Processing Subcategory**

- 408.320 Applicability; description of the non-Alaskan herring fillet processing subcategory.
- 408.321 Specialized definitions.
- 408.322 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology currently available.
- 408.323 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart AG—Abalone Processing Subcategory**

- 408.330 Applicability; description of the abalone processing subcategory.
- 408.331 Specialized definitions.
- 408.332 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 408.333 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

**Subpart O—Fish Meal Processing Subcategory**

**§ 408.150 Applicability; description of the fish meal processing subcategory.**

The provisions of this subpart are applicable to discharges resulting from the processing of menhaden on the Gulf and Atlantic Coasts and the processing of anchovy on the West Coast into fish meal, oil and solubles.

**§ 408.151 Specialized definitions.**

For the purpose of this subpart: (a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) The term "seafood" shall mean the raw material, including freshwater and saltwater fish and shellfish, to be processed, in the form in which it is received at the processing plant.

**§ 408.152 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.**

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

(1) Any menhaden or anchovy fish meal reduction facility which utilizes a solubles plant to process stick water or ball water shall meet the following limitations.

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of seafood		
BOD <sub>5</sub> .....	4.7.....	3.5
TSS.....	2.3.....	1.3
Oil and grease.....	0.80.....	0.63
pH.....	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
BOD <sub>5</sub> .....	4.7.....	3.5
TSS.....	2.3.....	1.3
Oil and grease.....	0.80.....	0.63
pH.....	Within the range 6.0 to 9.0.	

(2) Any menhaden or anchovy fish meal reduction facility not covered under § 408.152(b) (1) shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of seafood		
BOD <sub>5</sub> .....	3.5.....	2.8
TSS.....	2.0.....	1.7
Oil and grease.....	3.2.....	1.4
pH.....	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
BOD <sub>5</sub> .....	3.5.....	2.8
TSS.....	2.0.....	1.7
Oil and grease.....	3.2.....	1.4
pH.....	Within the range 6.0 to 9.0.	

**§ 408.153 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.**

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

## RULES AND REGULATIONS

State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

(1) Any hand-butchered salmon processing facility located in population or processing centers including but not limited to Anchorage, Cordova, Juneau, Ketchikan, Kodiak, and Petersburg shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of seafood		
TSS	1.7	1.4
Oil and grease	0.20	0.17
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
TSS	1.7	1.4
Oil and grease	0.20	0.17
pH	Within the range 6.0 to 9.0.	

(2) Any hand-butchered salmon processing facility not covered under § 408.162 (b) (1) shall meet the following limitations: No pollutants may be discharged which exceed 1.27 cm (0.5 inch) in any dimension.

§ 408.163 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of seafood		
BOD <sub>5</sub>	4.0	2.9
TSS	2.3	1.3
Oil and grease	0.80	0.63
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
BOD <sub>5</sub>	4.0	2.9
TSS	2.3	1.3
Oil and grease	0.80	0.63
pH	Within the range 6.0 to 9.0.	

## Salmon Processing Subcategory

§ 408.160 Applicability; description of the Alaskan hand-butchered salmon processing subcategory.

The provisions of this subpart are applicable to discharges resulting from the hand-butchered of salmon in Alaska.

§ 408.161 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) The term "seafood" shall mean the raw material, including freshwater and saltwater fish and shell fish, to be processed, in the form in which it is received at the processing plant.

§ 408.162 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors, such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of seafood		
TSS	1.5	1.2
Oil and grease	0.18	0.15
pH	Within the range 6.0 to 9.0.	
(English units) lb/100 lb of seafood		
TSS	1.5	1.2
Oil and grease	0.18	0.15
pH	Within the range 6.0 to 9.0.	

## Subpart Q—Alaskan Mechanized Salmon Processing Subcategory

§ 408.170 Applicability; description of the Alaskan mechanized salmon processing subcategory.

The provisions of this subpart are applicable to discharges resulting from the mechanized butchering of salmon in Alaska.

§ 408.171 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) The term "seafood" shall mean the raw material, including freshwater and saltwater fish and shellfish, to be processed, in the form in which it is received at the processing plant.

§ 408.172 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information,

the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

(1) Any mechanized salmon processing facility located in population or processing centers including but not limited to Anchorage, Cordova, Juneau, Ketchikan, Kodiak, and Petersburg shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kg of seafood		
TSS	27	22
Oil and grease	27	10
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
TSS	27	22
Oil and grease	27	10
pH	Within the range 6.0 to 9.0.	

(2) Any mechanized salmon processing facility not covered under § 408.172 (b) (1) shall meet the following limitations: No pollutants may be discharged which exceed 1.27 cm (0.5 inch) in any dimension.

§ 408.173 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

(a) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

(1) Any mechanized salmon processing facility located in population or processing centers including but not limited to Anchorage, Cordova, Juneau,

Ketchikan, Kodiak, and Petersburg shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kg of seafood		
BOD <sub>5</sub>	16	13
TSS	2.6	2.2
Oil and grease	2.6	1.0
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
BOD <sub>5</sub>	16	13
TSS	2.6	2.2
Oil and grease	2.6	1.0
pH	Within the range 6.0 to 9.0.	

(2) Any mechanized salmon processing facility not covered under § 408.173(a) (1) shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kg of seafood		
TSS	23	21
Oil and grease	23	10
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
TSS	23	21
Oil and grease	23	10
pH	Within the range 6.0 to 9.0.	

**Subpart R—West Coast Hand-Butchered Salmon Processing Subcategory**

§ 408.180 Applicability; description of the West Coast hand-butchered salmon processing subcategory.

The provisions of this subpart are applicable to discharges resulting from the hand-butchered of salmon on the West Coast.

§ 408.181 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) The term "seafood" shall mean the raw material, including freshwater and saltwater fish and shellfish, to be processed, in the form in which it is received at the processing plant.

§ 408.182 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to col-

lect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kg of seafood		
TSS	1.7	1.4
Oil and grease	0.20	0.17
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
TSS	1.7	1.4
Oil and grease	0.20	0.17
pH	Within the range 6.0 to 9.0.	

§ 408.183 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this



section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of seafood		
BOD <sub>5</sub> .....	1.2.....	1.0
TSS.....	0.15.....	0.12
Oil and grease.....	0.02.....	0.02
pH.....	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
BOD <sub>5</sub> .....	1.2.....	1.0
TSS.....	0.15.....	0.12
Oil and grease.....	0.02.....	0.02
pH.....	Within the range 6.0 to 9.0.	

**Subpart S—West Coast Mechanized Salmon Processing Subcategory**

**§ 408.190 Applicability; description of the West Coast mechanized salmon processing subcategory.**

The provisions of this subpart are applicable to discharges resulting from the mechanized butchering of salmon on the West Coast.

**§ 408.191 Specialized definitions.**

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) The term "seafood" shall mean the raw material, including freshwater and saltwater fish and shellfish, to be processed, in the form in which it is received at the processing plant.

**§ 408.192 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.**

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of

such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

(1) Any mechanized salmon processing facility which processes more than 1816 kg (4000 lbs) of raw material per day on any day during a calendar year shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of seafood		
BOD <sub>5</sub> .....	41.....	34
TSS.....	8.2.....	6.7
Oil and grease.....	4.0.....	1.6
pH.....	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
BOD <sub>5</sub> .....	41.....	34
TSS.....	8.2.....	6.7
Oil and grease.....	4.0.....	1.6
pH.....	Within the range 6.0 to 9.0.	

(2) Any mechanized salmon processing facility not covered under § 408.192

(b) (1) shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of seafood		
TSS.....	27.....	22
Oil and grease.....	27.....	10
pH.....	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
TSS.....	27.....	22
Oil and grease.....	27.....	10
pH.....	Within the range 6.0 to 9.0.	

**§ 408.193 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.**

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of seafood		
BOD <sub>5</sub> .....	16.....	13
TSS.....	2.6.....	2.3
Oil and grease.....	2.6.....	1.0
pH.....	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
BOD <sub>5</sub> .....	16.....	13
TSS.....	2.6.....	2.3
Oil and grease.....	2.6.....	1.0
pH.....	Within the range 6.0 to 9.0.	

**Subpart T—Alaskan Bottom Fish Processing Subcategory**

**§ 408.200 Applicability; description of the Alaskan bottom fish processing subcategory.**

The provisions of this subpart are applicable to discharges resulting from the processing of bottom fish such as halibut in Alaska.

**§ 408.201 Specialized definitions.**

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) The term "seafood" shall mean the raw material, including freshwater and saltwater fish and shellfish, to be processed, in the form in which it is received at the processing plant.

**§ 408.202 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.**

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to

the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

(1) Any Alaskan bottom fish processing facility located in population or processing centers including but not limited to Anchorage, Cordova, Juneau, Ketchikan, Kodiak, and Petersburg shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kg of seafood		
TSS	1.9	1.7
Oil and grease	0.11	0.09
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
TSS	1.9	1.7
Oil and grease	0.11	0.09
pH	Within the range 6.0 to 9.0.	

(2) Any Alaskan bottom-fish processing facility not covered under § 408.202 (b) (1) shall meet the following limitations: No pollutants may be discharged which exceed 1.27 cm (0.5 inch) in any dimension.

§ 408.203 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pol-

lutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kg of seafood		
TSS	1.1	1.0
Oil and grease	0.07	0.06
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
TSS	1.1	1.0
Oil and grease	0.07	0.06
pH	Within the range 6.0 to 9.0.	

**Subpart U—Non-Alaskan Conventional Bottom Fish Processing Subcategory**

§ 408.210 Applicability; description of the non-Alaskan conventional bottom fish processing subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing of bottom fish outside of Alaska in which the unit operations are carried out predominantly through manual methods. The provisions of this subpart apply to the processing of currently, commercially processed species of bottom fish such as flounder, ocean perch, haddock, cod, sea catfish, sole, halibut, and rockfish. These provisions apply to existing facilities processing more than 1816 kg (4000 lbs) of raw material per day on any day during a calendar year and all new sources.

§ 408.211 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) The term "seafood" shall mean the raw material, including freshwater and saltwater fish and shellfish, to be processed, in the form in which it is received at the processing plant.

§ 408.212 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry sub-categorization and effluent levels established. It is, however, possible that data

which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kg of seafood		
TSS	2.1	1.6
Oil and grease	0.25	0.20
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
TSS	2.1	1.6
Oil and grease	0.25	0.20
pH	Within the range 6.0 to 9.0.	

§ 408.213 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kkg of product		
BOD <sub>5</sub> .....	3.6.....	3.5
TSS.....	8.7.....	8.3
Oil and grease.....	0.78.....	0.26
pH.....	Within the range 6.0 to 9.0.....	
(English units) lb/1000 lb of product		
BOD <sub>5</sub> .....	3.6.....	3.5
TSS.....	8.7.....	8.3
Oil and grease.....	0.78.....	0.26
pH.....	Within the range 6.0 to 9.0.....	

**Subpart V—Non-Alaskan Mechanized Bottom Fish Processing Subcategory**

**§ 408.220** Applicability; description of the non-Alaskan mechanized bottom fish processing subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing of bottom fish outside of Alaska in which the unit operations are carried out predominately through mechanized methods. The provisions of this subpart apply to the processing of bottom fish such as whiting and croaker.

**§ 408.221** Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) The term "seafood" shall mean the raw material, including freshwater and saltwater fish and shellfish, to be processed, in the form in which it is received at the processing plant.

**§ 408.222** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Re-

gional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kkg of seafood		
TSS.....	14.....	10
Oil and grease.....	5.7.....	3.3
pH.....	Within the range 6.0 to 9.0.....	
(English units) lb/1000 lb of seafood		
TSS.....	14.....	10
Oil and grease.....	5.7.....	3.3
pH.....	Within the range 6.0 to 9.0.....	

**§ 408.223** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties; controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kkg of seafood		
BOD <sub>5</sub> .....	6.5.....	5.3
TSS.....	1.1.....	0.83
Oil and grease.....	0.46.....	0.26
pH.....	Within the range 6.0 to 9.0.....	
(English units) lb/1000 lb of seafood		
BOD <sub>5</sub> .....	6.5.....	5.3
TSS.....	1.1.....	0.83
Oil and grease.....	0.46.....	0.26
pH.....	Within the range 6.0 to 9.0.....	

**Subpart W—Hand-Shucked Clam Processing Subcategory**

**§ 408.230** Applicability; description of the hand-shucked clam processing subcategory.

The provisions of this subpart are applicable to discharges resulting from existing hand-shucked clam processing facilities which process more than 1816 kg (4000 lbs) of raw material per day on any day during a calendar year and all new sources.

**§ 408.231** Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) The term "seafood" shall mean the raw material, including freshwater and saltwater fish and shellfish, to be processed, in the form in which it is received at the processing plant.

**§ 408.232** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES

permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kg of seafood		
TSS	20	19
Oil and grease	0.23	0.18
pH	Within the range 6.0 to 9.0	
(English units) lb/1000 lb of seafood		
TSS	20	19
Oil and grease	0.23	0.18
pH	Within the range 6.0 to 9.0	

**§ 408.233 Effluent limitations guidelines** representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kg of seafood		
TSS	20	19
Oil and grease	0.23	0.18
pH	Within the range 6.0 to 9.0	
(English units) lb/1000 lb of seafood		
TSS	20	19
Oil and grease	0.23	0.18
pH	Within the range 6.0 to 9.0	

**Subpart X—Mechanized Clam Processing Subcategory**

**§ 408.240 Applicability; description of the mechanized clam processing subcategory.**

The provisions of this subpart are applicable to discharges resulting from mechanized clam processing.

**§ 408.241 Specialized definitions.**

For the purpose of this subpart: (a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) The term "seafood" shall mean the raw material, including freshwater and saltwater fish and shellfish, to be processed, in the form in which it is received at the processing plant.

**§ 408.242 Effluent limitations guidelines** representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested persons may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relat-

ing to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kg of seafood		
TSS	7.7	6.1
Oil and grease	0.23	0.43
pH	Within the range 6.0 to 9.0	
(English units) lb/1000 lb of seafood		
TSS	7.7	6.1
Oil and grease	0.23	0.43
pH	Within the range 6.0 to 9.0	

**§ 408.243 Effluent limitations guidelines** representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of seafood		
BOD <sub>5</sub> .....	2.9.....	2.7
TSS.....	7.4.....	3.7
Oil and grease.....	0.18.....	0.09
pH.....	Within the range 6.0 to 9.0.....	
(English units) lb/1000 lb of seafood		
BOD <sub>5</sub> .....	2.9.....	2.7
TSS.....	7.4.....	3.7
Oil and grease.....	0.18.....	0.09
pH.....	Within the range 6.0 to 9.0.....	

**Subpart Y—Pacific Coast Hand Shucked Oyster Processing Subcategory**

**§ 408.250 Applicability; description of the Pacific Coast hand shucked oyster processing subcategory.**

The provisions of this subpart are applicable to discharges resulting from existing Pacific Coast hand-shucked oyster processing facilities which process more than 454 kg (1000 lbs) of product per day on any day during a calendar year and all new sources.

**§ 408.251 Specialized definitions.**

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) The term "product" shall mean the weight of the oyster meat after shucking.

**§ 408.252 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.**

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those spe-

cified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharged effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent Limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of product		
TSS.....	37.....	35
Oil and grease.....	1.7.....	1.0
pH.....	Within the range 6.0 to 9.0.....	
(English units) lb/1000 lb of product		
TSS.....	37.....	35
Oil and grease.....	1.7.....	1.0
pH.....	Within the range 6.0 to 9.0.....	

**§ 408.253 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.**

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent Limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of product		
BOD <sub>5</sub> .....	3.6.....	3.5
TSS.....	8.7.....	8.3
Oil and grease.....	0.78.....	0.26
pH.....	Within the range 6.0 to 9.0.....	
(English units) lb/1000 lb of product		
BOD <sub>5</sub> .....	3.6.....	3.5
TSS.....	8.7.....	8.3
Oil and grease.....	0.78.....	0.26
pH.....	Within the range 6.0 to 9.0.....	

**Subpart Z—Atlantic and Gulf Coast Hand-Shucked Oyster Processing Subcategory**

**§ 408.260 Applicability; description of the Atlantic and Gulf Coast hand-shucked oyster processing subcategory.**

The provisions of this subpart are applicable to discharges resulting from existing hand-shucked oyster processing facilities on the Atlantic and Gulf Coasts which process more than 454 kg (1000 lbs) of product per day on any day during a calendar year and all new sources.

**§ 408.261 Specialized definitions.**

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) The term "product" shall mean the weight of the oyster meat after shucking.

**§ 408.262 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.**

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be

discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of product		
TSS	19	15
Oil and grease	0.77	0.70
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	19	15
Oil and grease	0.77	0.70
pH	Within the range 6.0 to 9.0.	

**§ 408.263 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.**

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of product		
BOD <sub>5</sub>	2.5	2.3
TSS	4.5	3.6
Oil and grease	0.45	0.15
pH	Within the range ~ 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD <sub>5</sub>	2.5	2.3
TSS	4.5	3.6
Oil and grease	0.45	0.15
pH	Within the range 6.0 to 9.0.	

**Subpart AA—Steamed/Canned Oyster Processing Subcategory**

**§ 408.270 Applicability; description of the steamed/canned oyster processing subcategory.**

The provisions of this subpart are applicable to discharges resulting from oysters which are mechanically shucked.

**§ 408.271 Specialized definitions.**

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) The term "product" shall mean the weight of the oyster meat after shucking.

**§ 408.272 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.**

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment, technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of product		
TSS	54	33
Oil and grease	1.0	1.3
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	54	33
Oil and grease	1.0	1.3
pH	Within the range 6.0 to 9.0.	

**§ 408.273 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.**

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of product		
BOD <sub>5</sub>	7.4	5.2
TSS	22	11
Oil and grease	0.26	0.23
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
BOD <sub>5</sub>	7.4	5.2
TSS	22	11
Oil and grease	0.26	0.23
pH	Within the range 6.0 to 9.0.	

**Subpart AB—Sardine Processing Subcategory**

**§ 408.280 Applicability; description of the sardine processing subcategory.**

The provisions of this subpart are applicable to discharges resulting from the canning of sardines or sea herring for sardines.

**§ 408.281 Specialized definitions.**

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) The term "seafood" shall mean the raw material, including freshwater and saltwater fish and shellfish, to be processed, in the form in which it is received at the processing plant.

**§ 408.282 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.**

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Admin-

istrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/pkg of seafood		
TSS	4.2	3.3
Oil and grease	2.9	1.6
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
TSS	4.2	3.3
Oil and grease	2.9	1.6
pH	Within the range 6.0 to 9.0.	

**§ 408.283** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/ekg of seafood		
BOD <sub>5</sub>	5.3	4.6
TSS	2.2	1.8
Oil and grease	1.7	0.87
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
BOD <sub>5</sub>	5.3	4.6
TSS	2.2	1.8
Oil and grease	1.7	0.87
pH	Within the range 6.0 to 9.0.	

**Subpart AC—Alaskan Scallop Processing Subcategory**

**§ 408.290** Applicability; description of the Alaskan scallop processing subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing of scallops in Alaska.

**§ 408.291** Specialized definitions.

For the purpose of this subpart:  
 (a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.  
 (b) The term "product" shall mean the weight of the scallop meat after processing.

**§ 408.292** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written

finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

(1) Any Alaskan scallop processing facility located in population or processing centers including but not limited to Anchorage, Cordova, Juneau, Ketchikan, Kodiak, and Petersburg shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of product		
TSS	0.62	0.62
Oil and grease	0.63	0.32
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS	0.62	0.62
Oil and grease	0.63	0.32
pH	Within the range 6.0 to 9.0.	

(2) any Alaskan scallop processing facility not covered under § 408.292(b) (1) shall meet the following limitations: No pollutants may be discharged which exceed 1.27 cm (0.5 inch) in any dimension.

**§ 408.293** Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of product		
TSS.....	0.80.....	0.60
Oil and grease.....	0.62.....	0.31
pH.....	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS.....	0.80.....	0.60
Oil and grease.....	0.62.....	0.31
pH.....	Within the range 6.0 to 9.0.	

**Subpart AD—Non-Alaskan Scallop Processing Subcategory**

**§ 408.300 Applicability; description of the non-Alaskan scallop processing subcategory.**

With the exception of land-based processing of calico scallops, the provisions of this subpart are applicable to discharges resulting from the processing of scallops outside of Alaska.

**§ 408.301 Specialized definitions.**

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) The term "product" shall mean the weight of the scallop meat after processing.

**§ 408.302 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.**

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development

Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of product		
TSS.....	0.82.....	0.62
Oil and grease.....	0.63.....	0.32
pH.....	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS.....	0.82.....	0.62
Oil and grease.....	0.63.....	0.32
pH.....	Within the range 6.0 to 9.0.	

**§ 408.303 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.**

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of product		
TSS.....	0.80.....	0.60
Oil and grease.....	0.62.....	0.31
pH.....	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of product		
TSS.....	0.80.....	0.60
Oil and grease.....	0.62.....	0.31
pH.....	Within the range 6.0 to 9.0.	

**Subpart AE—Alaskan Herring Fillet Processing Subcategory**

**§ 408.310 Applicability; description of the Alaskan herring fillet processing subcategory.**

The provisions of this subpart are applicable to discharges resulting from the processing of herring fillets in Alaska.

**§ 408.311 Specialized definitions.**

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) The term "seafood" shall mean the raw material, including freshwater and saltwater fish and shellfish, to be processed, in the form in which it is received at the processing plant.

**§ 408.312 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.**

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of



the best practicable control technology currently available:

(1) any herring fillet processing facility located in population or processing centers including but not limited to Anchorage, Cordova, Juneau, Ketchikan, Kodiak and Petersburg shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of seafood		
TSS	25	24
Oil and grease	8.4	6.9
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
TSS	25	24
Oil and grease	8.4	6.9
pH	Within the range 6.0 to 9.0.	

(2) any Alaskan herring fillet processing facility not covered under § 408.312 (b) (1) shall meet the following limitations: No pollutants may be discharged which exceed 1.27 cm (0.5 inch) in any dimension.

§ 408.313 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

(a) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable.

(1) any herring fillet processing facility located in population or processing centers including but not limited to Anchorage, Cordova, Juneau, Ketchikan, Kodiak and Petersburg shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of seafood		
BOD <sub>5</sub>	8.6	6.7
TSS	1.9	1.7
Oil and grease	3.1	1.2
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
BOD <sub>5</sub>	8.6	6.7
TSS	1.9	1.7
Oil and grease	3.1	1.2
pH	Within the range 6.0 to 9.0.	

(2) Any Alaskan herring fillet processing facility not covered under § 408.313(a)(1) shall meet the following limitations:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of seafood		
TSS	19	17
Oil and grease	6.7	5.2
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
TSS	19	17
Oil and grease	6.7	5.2
pH	Within the range 6.0 to 9.0.	

**Subpart AF—Non-Alaskan Herring Fillet Processing Subcategory**

§ 408.320 Applicability; description of the non-Alaskan herring fillet processing subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing of herring fillets outside of Alaska.

§ 408.321 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) The term "seafood" shall mean the raw material, including freshwater and saltwater fish and shellfish, to be processed, in the form in which it is received at the processing plant.

§ 408.322 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue

NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed—
(Metric units) kg/kg of seafood		
TSS	25	24
Oil and grease	8.4	6.9
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
TSS	25	24
Oil and grease	8.4	6.9
pH	Within the range 6.0 to 9.0.	

§ 408.323 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kg of seafood		
BOD <sub>5</sub>	8.6	6.7
TSS	1.9	1.7
Oil and grease	3.1	1.2
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
BOD <sub>5</sub>	8.6	6.7
TSS	1.9	1.7
Oil and grease	3.1	1.2
pH	Within the range 6.0 to 9.0.	

**Subpart AG—Abalone Processing Subcategory**

**§ 408.330 Applicability; description of the abalone processing subcategory.**

The provisions of this subpart are applicable to discharges resulting from the processing of abalone in the contiguous states.

**§ 408.331 Specialized definitions.**

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this subpart.

(b) The term "seafood" shall mean the raw material, including freshwater and saltwater fish and shellfish, to be processed, in the form in which it is received at the processing plant.

**§ 408.332 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.**

In establishing the limitations set forth in this section, EPA took into account all information it was able to

collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kg of seafood		
TSS	11	9.2
Oil and grease	1.2	0.93
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
TSS	11	9.2
Oil and grease	1.2	0.93
pH	Within the range 6.0 to 9.0.	

**§ 408.333 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.**

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any one day	Average of daily values for thirty consecutive days shall not exceed
(Metric units) kg/kg of seafood		
TSS	10	8.7
Oil and grease	1.1	0.93
pH	Within the range 6.0 to 9.0.	
(English units) lb/1000 lb of seafood		
TSS	10	8.7
Oil and grease	1.1	0.93
pH	Within the range 6.0 to 9.0.	

[FR Dec.75-2725 Filed 1-29-75;8:45 am]