## ENVIRONMENTAL PROTECTION AGENCY

[ 40 CFR Part 407 ]

### CANNED AND PRESERVED FRUITS AND VEGETABLES PROCESSING INDUSTRY POINT SOURCE CATEGORY

#### Proposed Effluent Limitations Guidelines

Notice is hereby given that effluent limitations guidelines for existing sources and standards of performance and pretreatment standards for new sources set forth in tentative form below are proposed by the Environmental Protection Agency (EPA) for the apple juice subcategory (Subpart A), the apple products subcategory (Subpart B), the citrus products subcategory (Subpart C), the frozen potato products subcategory (Subpart D), and the dehydrated potato products subcategory (Subpart E), of the canned and preserved fruits and vegetabes processing industry category of point sources pursuant to sections 301, 304 (b) and (c), 306(b), and 307(c) of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251, 1311, 1314 (b) and (c), 1316 (b), and 1317(c); 86 Stat. 816 et seq.; P.L. 92-500) (the Act).

(a) *Legal authority.*—(1) *Existing point sources.* 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 7, 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) of 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 regulations proposed herein set forth effluent limitations guidelines, pursuant to section 304 (b) of the Act, for the apple juice subcategory (Subpart A), the apple products subcategory (Subpart B), the citrus products subcategory (Subpart C), the frozen potato products subcategory (Subpart D), and the dehydrated potato products subcategory (Subpart E), of the canned and preserved fruits and vegetables processing industry category.

(2) *New sources.* 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 306(b)(1)(B) of the Act requires the Administrator to propose regulations establishing Federal standards of performance for categories of new sources included in a list published pursuant to section 306(b)(1)(A) of the Act. The Administrator published in the FEDERAL REGISTER of January 16, 1973 (38 FR 1624), a list of 27 source categories, including the canned and preserved fruits and vegetables processing industry category. The regulations proposed herein set forth the standards of performance applicable to new sources for the apple juice subcategory (Subpart A), the apple products subcategory (Subpart B), the citrus products subcategory (Subpart C), the frozen potato products subcategory (Subpart D), and the dehydrated potato products subcategory (Subpart E), of the canned and preserved fruits and vegetables processing industry category.

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. Sections 407.15, 407.25, 407.35, 407.45, and 407.55, proposed below, provide pretreatment standards for new sources within the apple juice subcategory (Subpart A), the apple products subcategory (Subpart B), the citrus products subcategory (Subpart C), the frozen potato products subcategory (Subpart D), and the dehydrated potato products subcategory (Subpart E), of the canned and preserved fruits and vegetables processing industry 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 Development Document referred to below provides, pursuant to section 304(c) of the Act, information on such processes, procedures or operating methods.

(b) Summary and basis of proposed effluent limitations guidelines for existing sources and standards of performance and pretreatment standards for new sources.

(1) *General methodology.* The effluent limitations guidelines and standards of performance proposed 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: (1) The source, flow and volume of water used in the process employed and the sources of waste and waste waters in the operation, and (2) the constituents of all waste waters. The constituents of the waste waters which should be subject to effluent limitations guidelines and standards of performance 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, noise, and radiation, 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," the "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.

The pretreatment standards proposed herein are intended to be complementary to the pretreatment standards proposed for existing sources of 40 CFR Part 128. The bases for such standards are set forth in the FEDERAL REGISTER of July 19, 1973, 38 FR 19236. The provisions of Part 128 are equally applicable to sources which would constitute "new sources," under section 306 if they were to dis-

charge pollutants directly to navigable waters, except for § 128.133. That section provides a pretreatment standard for "incompatible pollutants" which requires application of the "best practicable control technology currently available," subject to an adjustment for amounts of pollutants removed by the publicly owned treatment works. Since the pretreatment standards proposed herein apply to new sources, §§ 407.15, 407.25, 407.35, 407.45, and 407.55 below amend § 128.133 to require application of the standard of performance for new sources rather than the "best practicable" standard applicable to existing sources under sections 301 and 304(b) of the Act.

(2) Summary of conclusions with respect to the apple juice subcategory (Subpart A), the apple products subcategory (Subpart B), the citrus products subcategory (Subpart C), the frozen potato products subcategory (Subpart D), and the dehydrated potato products subcategory (Subpart E), of the canned and preserved fruits and vegetables processing industry category.

(i) *Categorization.* The canned and preserved fruits and vegetables processing industry category was divided into five discrete subcategories for the purpose of developing effluent limitations. These subcategories coincide with a breakdown of the category according to raw material, organic and volumetric waste load and processing operation as outlined in the Development Document for the canned and preserved fruits and vegetables processing industry category. When a plant is subject to effluent limitations covering more than one subcategory, the plant discharge limitation shall be set by proration limitations for each subcategory based on the total raw material covered by each subcategory.

(1) *Subpart A—Apple Juice Subcategory.* The chemical composition and physical character of apples are different from either citrus fruits or white potatoes. The processing of apple juice involves a unique sequence of unit operations which result in an organic and volumetric waste load unlike that resulting from other apple production processes or from citrus or potato processes. The water usage and organic waste loads resulting from apple juice production are considerably less than waste water loads resulting from the production of other apple products or from citrus or potato processing operations. These waste water characteristics and factors, such as age and size of plant, plant location, and waste treatability, were found to support an exclusive apple juice subcategory.

(2) *Subpart B—Apple Products Subcategory.* The chemical composition and physical character of apples are different from either citrus fruits or white potatoes. The processing of apples into apple products (other than apple juice) involves common unit operations which result in similar waste loads. The water usage and organic waste loads resulting from the production of apple products are higher than waste loads resulting from the production of apple juice and lower than waste loads resulting from white potato processing operations. The biochemical oxygen demand (BOD5) from apple product waste water is higher than the BOD5 from citrus waste water but the total suspended solids and water usage are lower than that from citrus waste waters. These waste water differences and the similarities among apple products along with factors such as age and size of plant, plant location and waste treatability support a separate apple product subcategory. Caustic peeled and dehydrated apple products are specifically excluded.

(3) *Subpart C—Citrus Products Subcategory.* The chemical composition and physical character of citrus fruits are different from either apples or white potatoes. The processing of citrus fruits into products and co-products involve a number of unit operations which result in similar waste loads. The water usage and organic waste loads resulting from the production of citrus products and co-products are higher than waste water loads resulting from apple juice, or apple products (except biochemical oxygen demand for apple products) and considerably lower than waste water loads resulting from either dehydrated or frozen potato processing operations (except water usage for dehydrated potato products). These waste characteristics among citrus products and co-products along with factors such as age and size of plant, plant location, and waste treatability support a single, separate citrus products subcategory. Pectin and pharmaceutical products are specifically excluded.

(4) *Subpart D—Frozen Potato Products Subcategory.* The chemical composition and physical character of white potatoes are different from either apple or citrus fruits. The processing of frozen potato products involves a unique sequence of unit operations which results in an organic and volumetric waste load unlike that resulting from dehydrated potato production processes or from apple or citrus processes. The water usage and organic waste loads resulting from frozen potato processing are considerably higher than waste water loads resulting from the production of dehydrated potato products or from apple or citrus processing operations. These waste water characteristics and factors such as age and size of plant, plant location, and waste treatability were found to support a separate frozen potato products subcategory.

(5) *Subpart E—Dehydrated Potato Products Subcategory.* The chemical composition and physical character of white potatoes are different from either apples or citrus fruits. The processing of dehydrated potato products involves a unique sequence of unit operations which results in an organic and volumetric waste load unlike that resulting from frozen potato production processes or from apple or citrus processes. The water usage and organic waste loads resulting from dehydrated potato processing are considerably less than waste water loads resulting from the production of frozen potato products and significantly higher than waste water loads from apple or citrus processing operations (except waste usage from citrus products). These waste water characteristics along with factors such as age and size of plant, plant location, and waste treatability, were found to support a separate dehydrated potato products subcategory.

(ii) *Waste characteristics.* The significant pollutant parameters in waste waters resulting from the apple, citrus and potato processing subcategories of the canned and preserved fruits and vegetables industry category include biochemical oxygen demand (BOD5), total suspended non-filterable solids (TSS) and pH.

Several other waste water pollutants are formed in apple, citrus or potato processing waste waters but these pollutants are considered to be of lesser importance because available data has indicated these pollutants are normally removed when BOD5 or TSS are removed or they occur in insignificant quantities. Some cooling water is used throughout the fruits and vegetables industry and large amounts of cooling water are used in the processing of citrus products; however, heat is not a discharge problem when the cooling water is combined with the process waste water.

Waste water from process steps such as peeling, trimming, slicing, transporting, blanching, and cooking, and water from periodic clean-up procedures are the principle waste water streams in apple, citrus or potato processing. Raw waste load data have been collected on these waste waters for each subcategory of this industry, and information assembled on the treatment procedures required for the waste waters.

Three constituents of the waste water from plants within the apple, citrus or potato processing industry have been found which could interfere with, pass through, or otherwise be incompatible with a well designed and operated publicly owned activated sludge or trickling filter waste water treatment plant. Waste water constituents include caustic solutions from peeling operations such as lye dip potato peelers, D'limonene from citrus peel processing operations, and oil from frying operations. Control methods are available and should be used to keep harmful quantities of these materials from being discharged to municipal waste water treatment facilities.

(iii) *Origin of waste water pollutants in the canned and preserved fruits and vegetables processing industry category.* Many of the process steps used in the canning, dehydrating or freezing of fruits and vegetables are common to the industry as a whole. Typically, the fruits or vegetables are received, washed and sorted to prepare them for subsequent processing. Commodities such as apples, citrus and potatoes are then usually peeled when the end product style is to be a solid form (slices, cubes or powder). If the final product is to be a juice or liquid, the peel may not be removed. Subsequent process steps following the peel removal in which water may be used are trimming, slicing, blanching, cooling, cook-

ing, and can washing or cooling. Water transport may be used in one or more parts of the process, and clean-up is common to each fruit and vegetable processing operation. Cooling water is used in large quantities in the citrus products subcategory and it is generally segregated from process water. The character of the process waste clean-up waters are similar in that they contain biodegradable organic matter. Thus, the in-plant control measures and end-of-process treatment techniques are similarly effective in controlling and treating apple, citrus or potato processing wastes.

(iv) *Treatment and control technology.* In-plant procedures to control pollution include strict management control over housekeeping and water use practices, minimization of the intake of water by reuse and recirculation of waste waters and dry clean-up procedures before washdown.

"End-of-process" waste water treatment processes include preliminary screening, primary sedimentation, and biological treatment. Land treatment such as spray or flood irrigation is an attractive alternative waste water treatment process for many processors with suitable and sufficient land. Cooling towers are used by numerous citrus processors to recirculate cooling waters.

Solid waste control should be considered. Solid residue and sludge are potential problems because of the need for periodic disposal. Solid waste is being handled by processors in each subcategory as animal feed. In a few cases, however, solid waste cannot be handled as feed. In these cases, it must be handled properly to assure no landfill or associated problems develop.

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 demonstrated control technology, processes, operating methods or other alternatives.

Where sufficient quantities of suitable land are available, land treatment such as spray irrigation is recommended as best practicable control technology currently available.

Best practicable control technology currently available for the apple juice and apple products subcategories, the citrus products subcategory, and the frozen and dehydrated potato products subcategories includes preliminary screening and biological treatment.

For the citrus products subcategory only, it also includes cooling towers for the recirculation of cooling water containing small amounts of BOD5. For the frozen and dehydrated potato products subcategories only, it also includes primary sedimentation of process waste water.

The specified level of technology is practicable because it is being practiced by plants in all subcategories using multiple aerated lagoons, activated sludge, anaerobic plus aerobic lagoons, trickling filters, trickling filters plus aerated lagoons or activated sludge plus aerated lagoons.

Four apple plants including one apple juice processing plant are presently achieving this level of effluent reduction for BOD5 and TSS with biological treatment. Activated sludge, anaerobic plus aerobic lagoons, multiple aerobic lagoons, and trickling filters plus aerated lagoons are the exemplary biological treatment systems.

Five citrus product plants are currently achieving this level of effluent reduction for BOD5 and TSS. Two additional citrus processors are meeting the BOD5 limitations only. Multiple aerated lagoons, anaerobic plus aerobic lagoons, aerated lagoons with trickling filters and activated sludge are the exemplary treatment systems. Of these seven plants, five would not require cooling towers or ponds for barometric cooling waters.

One American and two Canadian potato processing plants are able to achieve high levels of effluent reduction for BOD5 and TSS through the utilization of exemplary biological treatment systems. Another American potato processing plant is able to achieve high levels of effluent reduction for BOD5. The exemplary treatment systems are activated sludge, trickling filters, anaerobic plus aerobic lagoons, and multiple aerated lagoons.

Thus, biological treatment has been shown to be both practicable and the currently available technology for achieving the 1977 level of effluent reduction for the apple juice and apple products subcategories, citrus products subcategory, and frozen and dehydrated potato products subcategories. In addition, the guidelines can be achieved by land treatment through spray irrigation or flood irrigation or other ultimate disposal technologies as described in the Development Document. Over fifty percent of the plants processing apple juice and apple products and over fifty percent of the apple processing capacity utilize land treatment to dispose of their wastes; at least ten additional apple plants are presently achieving an effluent reduction greater than required by the application of the best practicable control technology currently available through land treatment. Over fifty percent of the citrus and frozen and dehydrated potato processing plants and over fifty percent of the citrus and potato processing capacity utilize land treatment to dispose of their wastes; at least twenty additional citrus plants and twelve additional potato plants are currently achieving an effluent reduction greater than required by the application of the best practicable control technology currently available.

Best available control technology economically achievable for the five apple, citrus, and potato subcategories include the best practicable control technology currently available along with additional biological treatment components and in a few cases, advanced treatment such as multi-media or sand filtration.

Biological treatment is practiced throughout the apple, citrus and potato industry and sand filtration is practiced in at least one potato plant (England). With present biological treatment systems without advanced treatment methods such as sand filtration, at least one plant in each of the five subcategories is presently achieving the high levels of effluent reduction required by the application of the best available control technology economically achievable.

There is an additional fifty percent of the apple, citrus, and potato industry that is presently using land treatment; over forty apple, citrus or potato plants are presently achieving an effluent reduction greater than required by the application of the best available control technology economically achievable and many have no discharge of pollutants to navigable waters. This technology is used with and without holding ponds in Idaho, the Northwest, California, Pennsylvania, Virginia, New York, and Florida. Most other States also have land treatment of the fruits and vegetables industry category. Application of technology for greatly reduced water use will facilitate land disposal. Experience has shown that good management practices assure that land disposal and irrigation systems can be maintained commensurate with crop need and soil tolerance.

Treatment required to achieve the best available demonstrated control technology, processes, operating methods or other alternatives for new sources is the same as from best available control technology economically achievable.

(v) *Economic impact analysis.* A significant portion of the industry has already instituted some of the waste management alternatives, particularly biological treatment systems and product recovery practices which aid in pollution control.

The investment costs of meeting the 1977 level of effluent reduction by the use of biological treatment systems such as aerated lagoons are estimated to be $0.06 million for the apple juice subcategory, $0.36 million for the apple products subcategory, $1.78 million for the citrus products subcategory, $1.57 million for the frozen potato products subcategory, and $1.70 million for the dehydrated potato products subcategory.

The investment costs of meeting the 1977 level of effluent reduction by the use of biological systems such as activated sludge are estimated to be $0.55 million for apple juice, $2.39 million for apple products, $5.58 million for citrus products, $2.96 million for frozen potato products, and $3.03 million for dehydrated potato products.

The investment costs of meeting the 1977 level of effluent reduction by the use of land treatment systems (including land) such as spray irrigation are estimated to be $0.32 million for apple juice, $1.47 million for apple products, $4.39 million for citrus products, $2.89 for frozen potato products, and $2,52 million for dehydrated potato products.

The incremental investment costs of meeting the 1983 level of effluent reduction by the use of biological treatment systems such as several aerated lagoons and polishing lagoons are estimated to be $0.13 million for the apple juice subcategory, $1.34 million for the apple

products subcategory, $5.81 million for the citrus products subcategory, $2.57 million for the frozen potato products subcategory, and $2.13 million for the dehydrated potato products subcategory.

The incremental investment cost of meeting the 1983 level of effluent reduction by the use of biological plus advanced treatment such as activated sludge, aerated lagoons, and multi-media or sand filtration is $0.37 million for apple juice, $1.63 million for apple products, $4.14 million for citrus products, $1.86 million for frozen potato products, and $1.87 million for dehydrated potato products.

The total estimated investment costs for the five subcategories to achieve the 1977 level of effluent reduction range from $17.1 million to $26.1 million, including $11.6 million for land and land treatment facilities. This investment cost range amounts to a cost of from $3.40 to $5.20 per annual ton of processing capacity and from 1.4 to 2.1 percent of the estimated apple, citrus and potato industry investment of $1.2 billion. The cost of achieving the proposed levels of pollutant discharge control for 1977 would be equivalent to 2.3 to 3.5 percent of the present retail price of the products considered in these subcategories.

The incremental investment costs for five apple, citrus and potato subcategories to achieve the 1983 level of effluent reduction are estimated to range from $9.9 million to $12.0 million. This range in investment cost amounts to a cost of from $1.90 to $2.30 per annual ton of processing capacity and from 0.8 to 1.0 percent of the estimated industry investment. The cost of achieving the proposed levels of pollutant discharge control for 1983 would be equivalent to 1.3 to 1.6 percent of the present retail price of the products considered in these subcategories.

The combined investment costs for the five apple, citrus and potato subcategories to achieve both the 1977 and the 1983 levels of effluent reduction are estimated to range from $29 million to $36 million. This combined cost amounts to a cost of between $5.70 and $7.20 per annual ton of processing capacity and between 2.4 and 3.0 percent of the estimated industry investment. The combined cost of achieving the proposed levels of pollutant discharge control for 1977 and 1983 would be equivalent to 3.8 to 4.9 percent of the present retail price of the products considered in these subcategories.

Non-water quality impacts of the pollution control systems were analyzed and found to be of little consequence. Energy requirements of the industry are relatively low: power required to operate the more refined mechanically aerated biological systems will increase consumption by considerably less than 10.0 percent. Solid wastes from treatment sludges and some odor from treatment systems are encountered, but no substantial impact can be identified. It has been demonstrated that most solid wastes from these subcategories can be converted to animal feed and this is the recommended method of dealing with the solid wastes derived from these subcategories.

It should be noted that a precise study of economic impact is difficult due to numerous other economic forces at work within an industry, and because of the great variability experienced from plant-to-plant in such factors as pollution control costs, profitability, and return on investment. In an economic study such as this, it is difficult to deal with these factors on an individual plant basis.

It is not expected that any significant economic impact would result from imposing the effluent limitation requirements of discharge of process waste water pollutants to navigable waters on all covered segments of this category by 1977 (best practicable control technology for most industry segments). Because of this conclusion, we judge that the proposed guidelines for 1977, 1983 and new sources are economically achievable. The small price increases projected will probably be fully passed on to the consuming public, since there are no substitutable products.

The report entitled "Development Document for Proposed Effluent Limitations Guidelines and New Source Performance Standards for the APPLE, CITRUS, and POTATO Segment of the Canned and Preserved Fruits and Vegetables Point Source Category" details the analysis undertaken in support of the regulations being proposed herein and is available for inspection in the EPA Information Center, Room 227, 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 proposed regulations is also available for inspection at these locations. Copies of both of these documents are being sent to persons or institutions affected by the proposed regulations, or who have placed themselves on a mailing list for this purpose (see EPA's Advance Notice of Public Review Procedures, 38 FR 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 Information Center, Environmental Protection Agency, Washington, D.C. 20460. Attention: Mr. Philip B. Wisman.

(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 proposed for the canned and preserved fruits and vegetables processing industry 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) National Canners Association; (4) American Frozen Food Institute; (5) Potato Processors of Idaho; (6) Florida Citrus Commission; (7) Florida Canners Association; (8) California-Arizona Citrus League; (9) Council for Agricultural Science and Technology; (10) Frozen Potato Products Institute, (11) American Society of Mechanical Engineers; (12) Hudson River Sloop Restoration, Inc.; (13) Conservation Foundation; (14) Businessmen for the Public Interest; (15) Environmental Defense Fund, Inc.; (16) Natural Resources Defense Council; (17) American Society of Civil Engineers; (18) National Wildlife Federation; (19) Water Pollution Control Federation; (20) Ohio River Valley Sanitation Commission; (21) New England Interstate Water Pollution Control Commission; (22) Delaware River Basin Commission; (23) U.S. Dept. of Health, Education, and Welfare; (24) U.S. Dept. of Commerce; (25) U.S. Dept. of Agriculture; (26) Water Resources Council; and (27) U.S. Dept. of the Interior.

The following organizations responded with comments: National Canners Association and American Frozen Food Institute; Potato Processors of Idaho; Lake Michigan Federation; Council for Agricultural Science and Technology; Florida Canners Association; California-Arizona Citrus League; Florida Citrus Commission; Institute of Gas Technology; Ore-Ida Foods; Sunkist Growers; Stearns, Conrad and Schmidt Consulting Engineers; U.S. Dept. of Health, Education, and Welfare; U.S. Dept. of Interior; U.S. Dept of Agriculture; General Counsel of the Dept. of Commerce; State of Pennsylvania; State of North Carolina; State of Wisconsin; State of Colorado; State of Nebraska, State of Florida; Texas Water Quality Board; State of Michigan; State of Georgia; and American Society of Civil Engineers.

The comments were highly variable, ranging from full approval to rejection. It must be clearly understood that the treatment technologies used to develop the effluent limitations are alternative systems that have operated satisfactorily.

The primary issues raised in the development of the proposed effluent limitation guidelines and standards of performance and the treatment of these issues herein are as follows:

(1) Some comments were to the effect that the limitations were too stringent and not substantiated by data used in the study. Furthermore, the criticism was made that the sampling program was inadequate and unable to quantify the variability of waste loads. As explained in the Development Document, the degree of effluent reduction required by the applicable limitations currently is being attained by plants in all subcategories. Additionally, established alternative in-plant control and waste treatment procedures are readily available for application by the industry. As also explained in the Development Document, the sampling program was used to supplement and confirm data supplied by the processors (or other sources). The success of this effort is reflected in the utilization of data from sixty-two different plants to compute industry raw waste loads.

Thus, the variability of waste loads has been considered in this computation as well as in the ratio of maximum daily limitations to maximum thirty day limitations.

(2) A number of commentors took the position that the limitations were not stringent enough and were developed from only a fraction of the industry still discharging to waterways. Limitations required by the implementation of best available control technology economically achievable have not been required as limitations for best practicable control technology currently available because the total cost of application of the technologies under the time limitations is too large in relation to the effluent reduction benefits to be achieved from such application. Land treatment and no discharge to navigable waterways has not been required because both suitable and adequate land at reasonable cost must be available and each processor may not have land meeting these requirements.

(3) The criticism was made that the performances of the biological systems used to develop the limitations were based on optimum performance. Each system's performance is based on as much information as available. In most cases the performance represents average results from the entire processing season. In a few cases more than a single processing season was used and in some cases less than a full processing season was used to evaluate the system's performance. Some plants currently are meeting the effluent limitations based on seasonal averages but may not achieve sufficient effluent reduction to meet each maximum thirty-day limitation. Nevertheless, at least one plant in each subcategory achieves sufficient effluent reduction to meet both maximum daily limitations and maximum thirty day limitations throughout the processing season.

(4) A number of comments from various sources were received regarding the accuracy of industry cost estimates. An assessment of these comments and a detailed economic analysis of the treatment technologies used to achieve the limitations have significantly refined the cost information about the industry. For example, the cost to the industry of land and land treatment facilities has been included. Neverthless, the economic impact analysis of the effect of the proposed limitations on the industry indicates no substantial adverse impact will result for any major segment of the industry.

(5) During the formulation of these proposed guidelines, commentors raised questions about the adequacy of the proposed sub-categorization in view of: (a) Variations in unit costs for small plants as compared with large plants; and (b) the possible effect of temperature on biological treatment efficiency. Information with appropriate supportive technical and economic background data on this question is specifically requested. Additionally, in developing the proposed guidelines, difficulty was experienced in obtaining sufficient information and data on which to base a full and quantitative evaluation of the economic impact. The information and data available show that there will be an economic impact. However, more information is desired to enable a fuller assessment of the overall impact with respect to plant closings, employment, and on local communities. Information and data is specifically, requested for the following: (i) Plant revenues, (ii) Production costs, (iii) Profits, (iv) Return on investment, (v) Pollution control costs, (vi) The level of capacity utilization for different size plants and the ability of plants to expand to a level where economies of scale can be realized; and (viii) Availability of access to municipal disposal systems or land irrigation disposal systems and the availability and costs of land for land-based disposal techniques. This is particularly important in the case of the potato processing segment for which only fragmentary data is available.

Interested persons may participate in this rulemaking by submitting written comments in triplicate to the EPA Information Center, Environmental Protection Agency, Washington, D.C. 20460. Attention: Mr. Philip B. Wisman. Comments on all aspects of the proposed regulations are solicited. In the event comments are in the nature of criticisms as to the adequacy of data which is 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 is essential to the development of the regulations. In the event comments address the approach taken by the Agency in establishing an effluent limitation guideline or standard of performance, 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, 304(b), 306, and 307 of the Act.

A copy of all public comments will be available for inspection and copying at the EPA Information Center, Room 227, 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 December 10, 1973, 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).

Dated: October 29, 1973.

JOHN QUARLES,
*Acting Administrator.*

## PART 407—EFFLUENT LIMITATIONS GUIDELINES FOR EXISTING SOURCES AND STANDARDS OF PERFORMANCE AND PRETREATMENT STANDARDS FOR NEW SOURCES FOR THE CANNED AND PRESERVED FRUITS AND PROCESSING INDUSTRY POINT SOURCE CATEGORY

### Subpart A—Apple Juice Subcategory

Sec.



### Subpart B—Apple Products Subcategory



### Subpart C—Citrus Products Subcategory



### Subpart D—Frozen Potato Products Subcategory

Subpart E—Dehydrated Potato Products Subcategory

Sec.
407.50 Applicability; description of dehydrated potato products subcategory.
407.51 Specialized definitions.
407.52 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
407.53 Effluent limitations guidelines representing the degree of effluent reduction attainable by application of the best available technology economically achievable.
407.54 Standards of performance for new sources.
407.55 Pretreatment standards for new sources.

AUTHORITY. Secs. 301, 304(b), 304(c), 306(b), 307(c), as amended; 33 U.S.C. 1251, 1311, 1314(b), 1314(c), 1316(b) and 1317(c).

## Subpart A—Apple Juice Subcategory

### § 407.10 Applicability; description of apple juice subcategory.

The provisions of this subpart are applicable to the discharges resulting from the processing of apples into apple juice or apple cider. When a plant is subject to effluent limitations covering more than one subcategory, the plant discharge limitation shall be set by proration limitations for each subcategory based on the total raw material covered by each subcategory.

### § 407.11 Specialized definitions.

For the purpose of this subpart:

(a) the following abbreviations shall have the following meanings: (i) "BOD5" shall mean five day biochemical oxygen demand; (ii) "TSS" shall mean total suspended nonfilterable solids; (iii) "kg" shall mean kilogram(s); (iv) "kkg" shall mean 1,000 kilograms; and (v) "lb" shall mean pound(s).

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

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

| *Effluent characteristic* | *Effluent limitation* |
|---|---|
| BOD5 | Maximum for any one day 0.8 kg/kkg raw material (1.6 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.2 kg/kkg raw material (0.4 lb/ton). |
| TSS | Maximum for any one day 1.0 kg/kkg raw material (2.0 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.25 kg/kkg raw material (0.5 lb/ton). |
| pH | Within the range of 6.0 to 9.0. |

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

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

| *Effluent characteristic* | *Effluent limitation* |
|---|---|
| BOD5 | Maximum for any one day 0.28 kg/kkg raw material (0.56 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.07 kg/kkg raw material (0.14 lb/ton). |
| TSS | Maximum for any one day 0.4 kg/kkg raw material 0.8 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.1 kg/kkg raw material (0.2 lb/ton). |
| pH | Within the range of 6.0 to 9.0. |

### § 407.14 Standards of performance for new sources.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged reflecting the greatest degree of effluent reduction 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 by a new point source subject to the provisions of this subpart:

| *Effluent characteristic* | *Effluent limitation* |
|---|---|
| BOD5 | Maximum for any one day 0.28 kg/kkg raw material (0.56 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.07 kg/kkg raw material (0.14 lb/ton). |
| TSS | Maximum for any one day 0.4 kg/kkg raw material (0.8 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.1 kg/kkg raw material (0.2 lb/ton). |
| pH | Within the range of 6.0 to 9.0. |

### § 407.15 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act, for a source within the apple juice subcategory, which is an industrial user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to navigable waters), shall be the standard set forth in 40 CFR 128.133, except that for the purposes of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in § 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major contributing industry shall be the standard of performance for new sources specified in 40 CFR 407.14: *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall be correspondingly reduced for that pollutant.

## Subpart B—Apple Products Subcategory

### § 407.20 Applicability; description of apple products subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing of apples into apple products. The processing of apples into caustic peeled or dehydrated products is specifically excluded. When a plant is subject to effluent limitations covering more than one subcategory, the plant discharge limitation shall be set by proration limitations for each subcategory based on the total raw material covered by each subcategory.

### § 407.21 Specialized definitions.

For the purposes of this subpart:

(a) The following abbreviations shall have the following meanings: (i) "BOD5" shall mean five day biochemical oxygen demand; (ii) "TSS" shall mean total suspended nonfilterable solids; (iii) "kg" shall mean kilogram(s); (iv) "kkg" shall mean 1,000 kilograms; and (v) "lb" shall mean pound(s).

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

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

| *Effluent characteristic* | *Effluent limitation* |
|---|---|
| BOD5 | Maximum for any one day 1.4 kg/kkg raw material (2.8 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.35 kg/kkg raw material (0.70 lb/ton). |
| TSS | Maximum for any one day 1.8 kg/kkg raw material (3.6 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.45 kg/kkg raw material (0.90 lb/ton). |
| pH | Within the range of 6.0 to 9.0. |

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

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be

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

| *Effluent characteristic* | *Effluent limitation* |
|---|---|
| BOD5 | Maximum for any one day 0.28 kg/kkg raw material (0.56 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.07 kg/kkg raw material (0.14 lb/ton). |
| TSS | Maximum for any one day 0.4 kg/kkg raw material (0.8 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.1 kg/kkg raw material (0.2 lb/ton). |
| pH | Within the range of 6.0 to 9.0. |

### § 407.24 Standards of performance for new sources.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged reflecting the greatest degree of effluent reduction 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 by a new point source subject to the provisions of this subpart:

| *Effluent characteristic* | *Effluent limitation* |
|---|---|
| BOD5 | Maximum for any one day 0.28 kg/kkg raw material (0.56 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.07 kg/kkg raw material (0.14 lb/ton). |
| TSS | Maximum for any one day 0.4 kg/kkg raw material (0.8 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.1 kg/kkg raw material (0.2 lb/ton). |
| pH | Within the range of 6.0 to 9.0 |

### § 407.25 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act, for a source within the apple products subcategory which is an industrial user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to navigable waters), shall be the standard set forth in 40 CFR Part 128, except that for the purposes of this section, 40 CFR 128.131 shall be amended to read as follows:

In addition to the prohibitions set forth in § 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major contributing industry shall be the standard of performance for new sources specified in 40 CFR 407.24: Provided, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall be correspondingly reduced for that pollutant.

## Subpart C—Citrus Products Subcategory

### § 407.30 Applicability; description of citrus products subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing of citrus into citrus products. When a plant is subject to effluent limitations covering more than one subcategory, the plant discharge limitation shall be set by proration limitations for each subcategory based on raw material covered by each subcategory.

### § 407.31 Specialized definitions.

For the purposes of this subpart:

(a) The following abbreviations shall have the following meanings: (i) "BOD5" shall mean five day biochemical oxygen demand; (ii) "TSS" shall mean total suspended nonfilterable solids; (iii) "kg" shall mean kilogram(s); (iv) "kkg" shall mean 1,000 kilograms; and (v) "lb" shall mean pound(s).

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

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

| *Effluent characteristic* | *Effluent limitation* |
|---|---|
| BOD5 | Maximum for any one day 1.0 kg/kkg raw material (2.0 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.25 kg/kkg raw material (0.5 lb/ton). |
| TSS | Maximum for any one day 2.2 kg/kkg raw material (4.4 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.55 kg/kkg raw material (1.1 lb/ton). |
| pH | Within the range of 6.0 to 9.0. |

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

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

| *Effluent characteristic* | *Effluent limitation* |
|---|---|
| BOD5 | Maximum for any one day 0.2 kg/kkg raw material (0.4 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.05 kg/kkg raw material (0.1 lb/ton). |
| TSS | Maximum for any one day 0.32 kg/kkg raw material (0.64 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.08 kg/kkg raw material (0.16 lb/ton). |
| pH | Within the range of 6.0 to 9.0. |

### § 407.34 Standards of performance for new sources.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged reflecting the greatest degree of effluent reduction 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 by a new point source subject to the provisions of this subpart:

| *Effluent characteristic* | *Effluent limitation* |
|---|---|
| BOD5 | Maximum for any one day. 0.2 kg/kkg raw material (0.4 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.05 kg/kkg raw material (0.1 lb/ton). |
| TSS | Maximum for any one day 0.32 kg/kkg raw material (0.64 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.08 kg/kkg raw material (0.16 lb/ton). |
| pH | Within the range of 6.0 to 9.0. |

### § 407.35 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act, for a source within the citrus products subcategory which is an industrial user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to navigable waters), shall be the standard set forth in 40 CFR Part 128, except that for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in § 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major contributing industry shall be the standard of performance for new sources specified in 40 CFR 407.34: Provided, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of

any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall be correspondingly reduced for that pollutant.

## Subpart D—Frozen Potato Products Subcategory

### § 407.40 Applicability; description of frozen potato products subcategory.

The provisions of this subpart are applicable to discharges resulting from the processing of white potatoes into frozen potato products. When a plant is subject to effluent limitations covering more than one subcategory, the plant discharge limitation shall be set by proration limitations for each subcategory based on the total raw material covered by each subcategory.

### § 407.41 Specialized definitions.

For the purpose of this subpart

(a) The following abbreviations shall have the following meanings: (i) "BOD5" shall mean five day biochemical oxygen demand (ii) "TSS" shall mean total suspended nonfilterable solids; (iii) "kg" shall mean kilogram(s); (iv) "kkg" shall mean 1,000 kilograms; and (v) "lb" shall mean pound(s).

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

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

| *Effluent characteristic* | *Effluent limitation* |
|---|---|
| BOD5 | Maximum for any one day 4.75 kg/kkg raw material (9.5 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.95 kg/kkg raw material (1.9 lb/ton). |
| TSS | Maximum for any one day 8.75 kg/kkg raw material (17.5 lb/ton). Maximum average of daily values for any period of thirty consecutive days 1.75 kg/kkg raw material (3.5 lb/ton). |
| pH | Within the range of 6.0 to 9.0. |

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

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

| *Effluent characteristic* | *Effluent limitation* |
|---|---|
| BOD5 | Maximum for any one day 0.8 kg/kkg raw material (1.6 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.16 kg/kkg raw material (0.32 lb/ton). |
| TSS | Maximum for any one day 1.35 kg/kkg raw material (2.7 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.27 kg/kkg raw material (0.54 lb/ton). |
| pH | Within the range of 6.0 to 9.0. |

### § 407.44 Standards of performance for new sources.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged reflecting the greatest degree of effluent reduction 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 by a new point source subject to the provisions of this subpart.

| *Effluent characteristic* | *Effluent limitation* |
|---|---|
| BOD5 | Maximum for any one day 0.8 kg/kkg raw material (1.6 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.16 kg/kkg raw material (0.32 lb/ton). |
| TSS | Maximum for any one day 1.35 kg/kkg raw material (2.7 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.27 kg/kkg raw material (0.54 lb/ton). |
| pH | Within the range of 6.0 to 9.0. |

### § 407.45 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act, for a source within the frozen potato products subcategory, which is an industrial user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to navigable waters), shall be the standard set forth in 40 CFR 128, except that for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in § 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major contributing industry shall be the standard of performance for new sources specified in 40 CFR 407.44: *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall be correspondingly reduced for that pollutant.

## Subpart E—Dehydrated Potato Products Subcategory

### § 407.50 Applicability; description of dehydrated potato products subcategory.

The provisions of this subpart are applicable to the discharges resulting from the processing of white potatoes into dehydrated potato products. When a plant is subject to effluent limitations covering more than one subcategory, the plant discharge limitation shall be set by proration limitations for each subcategory based on the total raw material covered by each subcategory.

### § 407.51 Specialized definitions.

For the purpose of this subpart:

(a) The following abbreviations shall have the following meanings: (i) "BOD5" shall mean five day biochemical oxygen demand; (iii) "TSS" shall mean total suspended nonfilterable solids; (iii) "kg" shall mean kilogram(s); (iv) "kkg" shall mean 1,000 kilograms; and (v) "lb" shall mean pound(s).

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

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

| *Effluent characteristic* | *Effluent limitation* |
|---|---|
| BOD5 | Maximum for any one day 4.0 kg/kkg raw material (8.0 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.8 kg/kkg raw material (1.6 lb/ton). |
| TSS | Maximum for any one day 8.0 kg/kkg raw material (16.0 lb/ton). Maximum average of daily values for any period of thirty consecutive days 1.6 kg/kkg raw material (3.2 lb/ton). |
| pH | Within the range of 6.0 to 9.0. |

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

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

| *Effluent characteristic* | *Effluent limitation* |
|---|---|
| BOD5 | Maximum for any one day 0.8 kg/kkg raw material (1.6 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.16 kg/kkg raw material (0.32 lb/ton). |
| TSS | Maximum for any one day 1.35 kg/kkg raw material (2.7 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.27 kg/kkg raw material (0.54 lb/ton). |
| pH | Within the range of 6.0 to 9.0. |

**§ 407.54 Standards of performance for new sources.**

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged reflecting the greatest degree of effluent reduction 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 by a new point source subject to the provisions of this subpart:

| *Effluent characteristic* | *Effluent limitation* |
|---|---|
| BOD5 | Maximum for any one day 0.8 kg/kkg raw material (1.6 lb/ton). Maximum average of daily values for any period of thirty consecutive days 0.16 kg/kkg raw material (0.32 lb/ton). |
| TSS | Maximum for any one day 1.35 kg/kkg raw material (2.7 lb/ton). Maximum average of daily values for any period of thirty consecutive days 027 kg/kkg raw material (0.54 lb/ton). |
| pH | Within the range of 6.0 to 9.0. |

**§ 407.55 Pretreatment standards for new sources.**

The pretreatment standards under section 307(c) of the Act, for a source within the dehydrated potato products subcategory which is an industrial user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to navigable waters), shall be the standard set forth in 40 CFR Part 128, except that for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in § 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major contributing industry shall be the standard of performance for new sources specified in § 407.54, 40 CFR, Part 40: *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall be correspondingly reduced for that pollutant.

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