

Chapter NR 225

CANNED AND PRESERVED FRUITS AND VEGETABLES

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NR 225.01 Purpose. The purpose of this chapter is to establish effluent limitations, standards of performance, and pretreatment standards for discharges of process wastes from the canned and preserved fruits and vegetables category of point sources and subcategories thereof.

Note: The authority for promulgation of this chapter is set forth in ch. NR 205.
History: Cr. Register, January, 1977, No. 253, eff. 2-1-77.

NR 225.02 Applicability. The effluent limitations, standards of performance, pretreatment standards, and other provisions of this chapter are applicable to pollutants or pollutant properties in discharges of process waste resulting from the production of canned fruits and vegetables in the following subcategories.

- (1) Apple juice,
- (2) Apple products, other than caustic peeled or dehydrated,
- (3) Citrus products,
- (4) Frozen white potato products,
- (5) Dehydrated white potato products,
- (6) Canned and preserved fruits,
- (7) Canned and preserved vegetables, and
- (8) Canned and miscellaneous specialties.

Note: Commodities and products included in subcategories (6) through (8) are listed in tables 1 and 2 of this chapter and defined in s. NR 225.03 (6) through (53).
History: Cr. Register, January, 1977, No. 253, eff. 2-1-77.

NR 225.03 Definitions. The following definitions are applicable to terms used in this chapter. Definitions of other terms and meanings of abbreviations are set forth in ch. NR 205.

- (1) "Large" means a point source that processes a total annual raw material production of fruits, vegetables, specialties and other products that exceeds 9,080 kkg (10,000 tons) per year.
- (2) "Medium" means a point source that processes a total annual raw material production of fruits, vegetables, specialties and other products that is between 1,816 kkg (2,000 tons) per year and 9,080 kkg (10,000 tons) per year.
- (3) "Daily maximum limitation" means the maximum quantity of suspended solids or of BOD which may be discharged in any one day.
- (4) "Daily average limitation" means the maximum daily average quantity of suspended solids or of BOD which may be discharged in a 30 day period.
- (5) "Annual limitation" means the maximum quantity of suspended solids or of BOD which may be discharged for the entire processing season or calendar year.
- (6) "Added ingredients" means the prepared sauces (prepared from items such as dairy products, starches, sugar, tomato sauce and concentrate, spices, and other related pre-processed ingredients) which are added during the canning and freezing of fruits and vegetables.
- (7) "Apricots" means the processing of apricots into the following product styles: canned and frozen, pitted and unpitted, peeled and unpeeled, whole, halves, slices, nectar, and concentrate.
- (8) "Baby food" means the processing of canned fresh fruits and vegetables, meats, eggs, fruit juices, cereal, formulated

entrees, desserts and snacks using fresh, pre-processed, or any combination of these and other food ingredients necessary for the production of infant foods.

(9) "Beets" means the processing of beets into the following product styles: canned and peeled, whole, sliced, diced, French style, sections, irregular, and other cuts but not dehydrated beets.

(10) "Broccoli" means the processing of broccoli into the following product styles: frozen, chopped, spears, and miscellaneous cuts.

(11) "Caneberries" means the processing of the following berries: canned and frozen blackberries, blueberries, boysenberries, currants, gooseberries, loganberries, ollalieberries, raspberries, and any other similar cane or bushberry but not strawberries or cranberries.

(12) "Canned onions" means the processing of onions into the following product styles: canned, frozen, and fried (canned), peeled, whole, sliced, and any other piece size but not including frozen, battered onion rings or dehydrated onions.

(13) "Carrots" means the processing of carrots into the following product styles: canned and frozen, peeled, whole, sliced, diced, nuggets, crinkle cut, julienne, shoestrings, chunks, chips and other irregular cuts, and juices but not dehydrated carrots.

(14) "Cherries, brined" means the processing of all varieties of cherries into the following product styles: canned, bottled and bulk, sweet and sour, pitted and unpitted, bleached, sweetened, colored and flavored, whole, halved and chopped.

(15) "Cherries, sour" means the processing of all sour varieties of cherries into the following product styles: frozen and canned, pitted and unpitted, whole, halves, juice, and concentrate.

(16) "Cherries, sweet" means the processing of all varieties of sweet cherries into the following product styles: frozen and canned, pitted and unpitted, whole, halves, juice and concentrate.

(17) "Chips, corn" means the processing of fried corn, made by soaking, rinsing, milling and extruding into a fryer without toasting. In terms of finished corn chips, 1 kg (lb) of finished product is equivalent to 0.9 kg (lb) of raw material.

(18) "Chips, potato" means the processing of fried chips, made from fresh or stored white potatoes, all varieties. In terms of finished potato chips, 1 kg (lb) of finished product is equivalent to 4 kg (lb) of raw material.

(19) "Chips, tortilla" means the processing of fried corn, made by soaking, rinsing, milling, rolling into sheets, toasting and frying. In terms of finished tortilla chips, 1 kg (lb) of finished product is equivalent to 0.9 kg (lb) of raw material.

(20) "Corn, canned" means the processing of corn into the following product styles: canned, yellow and white, whole kernel, cream style, and on-the-cob.

(21) "Corn, frozen" means the processing of corn into the following product styles: frozen, yellow and white, whole kernel and whole cob.

(22) "Cranberries" means the processing of cranberries into the following product styles: canned, bottled, and frozen, whole, sauce, jelly, juice and concentrate.

(23) "Dehydrated onions and garlic" means the processing of dehydrated onions and garlic into the following product styles: air, vacuum, and freeze dried, all varieties, diced, strips, and other piece sizes ranging from large sliced to powder but not including green onions, chives, or leeks.

(24) "Dehydrated vegetables" means the processing of dehydrated vegetables in the following product styles: air, vacuum and freeze dried, blanched and unblanched, peeled and unpeeled, beets, bell peppers, cabbage, carrots, celery, chili pepper, horse-radish, turnips, parsnips, parsley, asparagus, tomatoes, green beans, corn, spinach, green onion tops, chives, leeks, whole, diced, and any other piece size ranging from sliced to powder.

(25) "Dried fruit" means the processing of various fruits into the following product styles: air, vacuum, and freeze dried, pitted and unpitted, blanched and unblanched, whole, halves, slices and other similar styles of apples, apricots, figs, peaches, pears, prunes, canned extracted prune juice and pulp from rehydrated and cooked dehydrated prunes; but not including dates or raisins.

(26) "Dry beans" means the production of canned pinto, kidney, navy, great northern, red, pink or related type, with and without formulated sauces, meats and gravies.

(27) "Ethnic foods" means the production of canned and frozen Chinese and Mexican specialties utilizing fresh and pre-processed bean sprouts, bamboo shoots, water chestnuts, celery, cactus, tomatoes, and other similar vegetables necessary for the production of the various characteristic product styles.

(28) "Grape juice canning" means the processing of grape juice into the following products and product styles: canned and frozen, fresh and stored, natural grape juice for the manufacture of juices, drinks, concentrates, jams, jellies, and other related finished products but not wine or other spirits. In terms of raw material processed 1,000 kg (1,000 lb) of grapes is equivalent to 834 liters (100 gallons) of grape juice.

(29) "Grape pressing" means the washing and subsequent handling including pressing, heating, and filtration of natural juice from all varieties of grapes for the purpose of manufacturing juice, drink, concentrate, and jelly but not wine or other spirits. In terms of raw material processed 1,000 kg (1,000 lb) of grapes are equivalent to 834 liters (100 gallons) of grape juice.

(30) "Jams and jellies" means the production of jams, jellies and preserves defined as follows: the combination of fruit and fruit concentrate, sugar, pectin, and other additives in an acidic medium resulting in a gelatinized and thickened finished product.

(31) "Lima beans" means the processing of lima beans into the following product styles: canned and frozen, green and white, all varieties and sizes.

(32) "Mayonnaise and salad dressing" means the emulsified and nonemulsified semi-solid food prepared from the combining of edible vegetable oil with acidifying, and egg yolk containing ingredients, or gum and starch combinations to which certain colorings, spices, and flavorings have been added.

(33) "Mushrooms" means the processing of mushrooms into the following product styles: canned, frozen, dehydrated, all varieties, shapes and sizes.

(34) "Olives" means the processing of olives into the following product styles: canned, all varieties, fresh and stored, green ripe, black ripe, spanish, sicilian, and any other styles to which spices, acids, and flavorings may have been added.

(35) "Peaches" means the processing of peaches into the following product styles: canned or frozen, all varieties, peeled, pitted and unpitted, whole, halves, sliced, diced, and any other cuts, nectar, and concentrate but not dehydrated.

(36) "Pears" means the processing of pears into the following product styles: canned, peeled, halved, sliced, diced, and any other cuts, nectar and concentrate but not dehydrated.

(37) "Peas" means the processing of peas into the following product styles: canned and frozen, all varieties and sizes, whole.

(38) "Pickles, fresh" means the processing of fresh cucumbers and other vegetables, all varieties, all sizes from whole to relish, all styles, cured after packing.

(39) "Pickles, processed" means the processing of pickles, cucumbers, and other vegetables, all varieties, sizes, and types, made after fermentation and storage.

(40) "Pickles, salt stations" means the handling and subsequent preserving of cucumbers and other vegetables at salting stations or tank yards by salt and other chemical additions necessary to achieve proper fermentation for the packing of processed pickle products, and subsequent tank soaking.

(41) "Pineapples" means the processing of pineapple into the following product styles: canned, peeled, sliced, chunk, tidbit, diced, crushed, and any other related piece size, juice and concentrate. It also specifically includes the on-site production of by-products such as alcohol, sugar or animal feed.

(42) "Plums" means the processing of plums into the following product styles: canned and frozen, pitted and unpitted, peeled and unpeeled, blanched, and unblanched, whole, halved, and other piece size.

(43) "Potatoes" means:

(a) The processing of sweet potatoes into the following product styles: canned, peeled, solid, syrup, and vacuum packed; and

(b) The processing of white potatoes into the following product styles: canned, peeled, white, all varieties, whole and sliced.

(44) "Raisins" means the production of raisins from the following products: dried grapes, all varieties, bleached and unbleached, which have been cleaned and washed prior to packaging.

(45) "Sauerkraut canning" means the draining and subsequent filling and canning of fermented cabbage and juice.

(46) "Sauerkraut cutting" means the trimming, cutting, and subsequent preparatory handling of cabbage necessary for and including brining and fermentation, and subsequent tank soaking.

(47) "Snap beans" means the processing of snap beans into the following product styles: canned and frozen green, italian, wax, string, bush, and other related varieties, whole, french, fancy, extra standard, standard, and other cuts.

(48) "Soups" means the combination of various fresh and pre-processed meats, fish, dairy products, eggs, flours, starches, vegetables, spices, and other similar raw ingredients into a variety of finished mixes and styles but not including dehydrated soups.

(49) "Spinach" means the processing of spinach and leafy greens into the following product styles: canned or frozen, whole leaf, chopped, and other related cuts.

(50) "Squash" means the processing of pumpkin and squash into canned and frozen styles.

(51) "Strawberries" means the processing of strawberries into the following product styles: canned and frozen, whole, sliced, and pureed.

(52) "Tomatoes" means the processing of tomatoes into canned, peeled, whole, stewed, and related piece sizes; and processing of tomatoes into the following products and product styles: canned, peeled and unpeeled paste, concentrate, puree, sauce, juice, catsup and other similar formulated items requiring various other pre-processed food ingredients.

(53) "Tomato-starch-cheese canned specialties" means canned specialties resulting from a combination of fresh and pre-processed tomatoes, starches, cheeses, spices, and other flavorings necessary to produce a variety of products similar to but not exclusively raviolis, spaghetti, tamales, and enchiladas.

History: Cr. Register, January, 1977, No. 253, eff. 2-1-77.

NR 225.04 Compliance with effluent limitations and standards. Discharge of pollutants from facilities subject to the provisions of this chapter may not exceed, as appropriate:

(1) By July 1, 1977 effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available;

(2) By July 1, 1983 effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable;

(3) Pretreatment standards for discharges to publicly owned treatment works;

(4) Standards of performance for new sources.

History: Cr. Register, January, 1977, No. 253, eff. 2-1-77; r. and recr. Register, August, 1983, No. 322, eff. 9-1-83.

NR 225.05 Modification of effluent limitations.

(1) Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available may be modified in accordance with this section.

(2) An individual discharger or other interested person may submit evidence to the department 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 effluent limitations. On the basis of such evidence or other available information the department will make a written determination that such factors are or are not fundamentally different for that facility compared to those specified in the applicable sections of the EPA development documents identified in sub. (3). If such fundamentally different factors are found to exist, the department shall establish for the discharge effluent limitations in the WPDES permit either more or less stringent than the limitations in this chapter, to the extent dictated by such fundamentally different factors. Such limitations must be approved by EPA which may approve, disapprove, or specify other limitations.

(3) The EPA development documents for effluent limitations guidelines and new source performance standards, identified by segment title, by EPA document number and by publication date, applicable in accordance with sub. (2) are: Apple, Citrus, and Potato, EPA 440/1-74-027-a, March, 1974; Fruits, Vegetables, and Specialties, EPA 440/1-75-046, October, 1975.

(4) Copies of the development documents identified in sub. (3) are available for inspection at the office of the department of natural resources, the secretary of state's office, and the office of the revisor of statutes, and may be obtained for personal use from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20460.

History: Cr. Register, January, 1977, No. 253, eff. 2-1-77.

NR 225.06 Application of effluent limitations and standards. (1) The effluent limitations and standards set forth in this chapter shall be used in accordance with this section to establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this chapter, except as:

(a) They may be modified in accordance with s. NR 225.05,

(b) They may be superseded by more stringent limitations and standards necessary to achieve water quality standards or meet other legal requirements, or

(c) They may be supplemented or superseded by standards or prohibitions for toxic pollutants or by additional limitations for other pollutants required to achieve water quality.

(2) Except as provided in subs. (5) and (6), the quantities of suspended solids and BOD which may be discharged by a facility subject to the provisions of this chapter shall not exceed:

(a) Daily maximum and daily average limitations determined for discharges resulting from processing in each of subcategories (1) through (5);

(b) Daily maximum, daily average, and annual limitations determined for discharges resulting from the processing of each commodity or product in subcategories (6) through (8) in the case of facilities which discharge process waste waters continuously or intermittently during the processing season; or

(c) Annual limitations determined for discharge resulting from the processing of each commodity or product in subcategories (6) through (8) in the case of facilities employing long term waste stabilization where all or a portion of the process waste water discharge is stored for the entire processing season and released at a controlled rate with department approval.

(3) The limitations described in sub. (2) shall be based on production and determined by multiplying the appropriate quantity of production for each commodity by the corresponding effluent limitation or standard set forth in table 1 or 2 of this chapter.

(a) The production shall be in terms of product for commodities other than soup in subcategory (8) and in terms of raw material processed for other commodities.

(b) The production used to determine daily maximum and daily average limitations shall be the production for each commodity processed during the peak 30 consecutive day production period of the year for the facility.

(c) The production used to determine annual limitations shall be the production for each commodity during the entire processing season or calendar year.

(4) Discharge limitations for facilities subject to limitations covering more than one commodity or subcategory shall be the sum of limitations determined for the individual commodities or subcategories determined in accordance with subs. (2) and (3).

(5) The effluent limitations and standards set forth in this chapter for subcategories (6) through (8) are applicable only to large and medium size point source facilities or plants.

(6) For the purposes of ss. NR 225.10 and 225.11 the effluent limitations and standards of this chapter are not applicable to:

(a) Facilities which are single commodity 100% canned corn processing plants, or

(b) Facilities which are multi-commodity frozen vegetable processing plants with total annual raw material production less than 7,264 kkg (8,000 tons) per year.

History: Cr. Register, January, 1977, No. 253, eff. 2-1-77.

NR 225.10 Effluent limitations, best practicable treatment. The following effluent limitations for all or specific subcategories when applied in accordance with s. NR 225.06 establish, except as provided in s. NR 225.05, the quantity or quality of pollutants or pollutant properties which may be discharged by a facility subject to the provisions of this chapter after application to process wastes of the best practicable control technology currently available.

(1) The pH of all discharges resulting from processing in subcategories (1) through (5) shall be within the range of 6.0 to 9.0.

(2) The pH of all discharges resulting from processing in subcategories (6) through (8) shall be within the range of 6.0 to 9.5.

(3) The oil and grease content of all discharges resulting from processing in subcategory (8) shall not exceed 20 mg/l.

(4) The daily maximum, daily average, and annual limitations for suspended solids and BOD are set forth in table 1 in lbs/1,000 lbs or kg/1,000 kg of:

(a) Product other than soup in subcategory (8), and

(b) Raw material processed for commodities or products other than identified in par. (a).

History: Cr. Register, January, 1977, No. 253, eff. 2-1-77.

NR 225.11 Effluent limitations, best available treatment. The following effluent limitations for all specific subcategories when applied in accordance with s. NR 225.06 establish the quantity or quality of pollutants or pollutant properties which may be discharged by a facility subject to the provisions of this chapter after application to process wastes of the best available technology economically achievable:

(1) The pH of all discharges resulting from processing in subcategories (1) through (5) shall be within the range of 6.0 to 9.0.

(2) The pH of all discharges resulting from processing in subcategories (6) through (8) shall be within the range of 6.0 to 9.5.

(3) The oil and grease content of all discharges resulting from processing in subcategory (8) shall not exceed 10 mg/l.

(4) The daily maximum, daily average, and annual limitations for suspended solids and BOD are set forth in table 2 in lbs/1,000 lbs or kg/1,000 kg of:

- (a) Product other than soup in subcategory (8), and

(b) Raw material processed for commodities or products other than identified in par. (a).

(5) The fecal coliform present in all discharges resulting from processing in subcategories (1) through (5) shall not exceed an MPN of 400/100 ml.

History: Cr. Register, January, 1977, No. 253, eff. 2-1-77.

NR 225.12 Standards of performance. The effluent limitations set forth in s. NR 225.11 establish the quantity or quality of pollutants or pollutant properties which may be discharged by a facility which is a source subject to the provisions of this chapter.

History: Cr. Register, January, 1977, No. 253, eff. 2-1-77.

NR 225.13 Pretreatment standards. The pretreatment standards for discharges to publicly owned treatment works from sources subject to the provisions of this chapter shall be as set forth in ch. NR 211.

History: Cr. Register, January, 1977, No. 253, eff. 2-1-77; r. and recr. Register, August, 1983, No. 332, eff. 9-1-83.

**Table 1
BPT Effluent Limitations**

| Subcategory Commodity or Product | Daily Maximum | BOD Daily Average | Annual | Suspended Solids | | |
|-------------------------------------|------------------|----------------------|--------|------------------|------------------|--------|
| | | | | Daily Maximum | Daily Average | Annual |
| (1) Apple juice | 0.6 | 0.3 | na | 0.8 | 0.4 | na |
| (2) Apple products | 1.1 | 0.55 | na | 1.4 | 0.7 | na |
| (3) Citrus products | 0.8 | 0.4 | na | 1.7 | 0.85 | na |
| (4) Frozen white potatoes | 2.8 | 1.4 | na | 2.8 | 1.4 | na |
| (5) Dehyd. white potatoes | 2.4 | 1.2 | na | 2.8 | 1.4 | na |
| (6) Canned and preserved fruits | | | | | | |
| Apricots | 3.0 | 1.81 | 1.26 | 5.36 | 3.74 | 2.33 |
| Caneberries | 0.77 | 0.46 | 0.32 | 1.38 | 0.95 | 0.58 |
| Cherries, Brined | 2.87 | 1.78 | 1.28 | 5.18 | 3.68 | 2.38 |
| Sour | 1.77 | 1.11 | 0.81 | 3.2 | 2.3 | 1.52 |
| Sweet | 1.12 | 0.69 | 0.49 | 2.01 | 1.43 | 0.92 |
| Cranberries | 1.71 | 1.03 | 0.73 | 3.06 | 2.14 | 1.34 |
| Dried fruit | 1.86 | 1.13 | 0.80 | 3.34 | 2.34 | 1.48 |
| Grape juice, canning | 1.10 | 0.69 | 0.51 | 1.99 | 1.44 | 0.96 |
| pressing | 0.22 | 0.14 | 0.10 | 0.40 | 0.29 | 0.18 |
| Olives | 5.44 | 3.34 | 2.39 | 9.79 | 6.92 | 4.44 |
| Peaches | 1.51 | 0.93 | 0.67 | 2.72 | 1.93 | 1.26 |
| Pears | 1.77 | 1.12 | 0.83 | 3.21 | 2.32 | 1.55 |
| Pickles, fresh pack | 1.22 | 0.75 | 0.53 | 2.19 | 1.54 | 0.99 |
| process pack | 1.45 | 0.92 | 0.68 | 2.63 | 1.91 | 1.28 |
| salt stations | 0.18 | 0.12 | 0.09 | 0.33 | 0.25 | 0.18 |
| Pineapples | 2.18 | 1.33 | 0.96 | 3.85 | 2.76 | 1.81 |
| Plums | 0.69 | 0.42 | 0.29 | 1.24 | 0.87 | 0.54 |
| Raisins | 0.43 | 0.28 | 0.21 | 0.78 | 0.57 | 0.39 |
| Strawberries | 1.79 | 1.06 | 0.74 | 3.19 | 2.20 | 1.35 |
| Tomatoes | 1.21 | 0.71 | 0.49 | 2.15 | 1.48 | 0.90 |
| (7) Canned and preserved vegetables | | | | | | |
| Beets | 1.01 | 0.71 | 0.57 | 1.88 | 1.47 | 1.12 |
| Broccoli | 3.82 | 2.21 | 1.47 | 6.78 | 4.57 | 2.65 |
| Carrots | 1.76 | 1.11 | 0.82 | 3.19 | 2.30 | 1.54 |
| Corn, canned | 0.71 | 0.48 | 0.38 | 1.32 | 1.0 | 0.73 |
| frozen | 1.45 | 0.84 | 0.56 | 3.13 | 2.30 | 1.57 |
| Dehyd. onion and garlic | 2.45 | 1.46 | 0.98 | 4.49 | 3.02 | 1.76 |
| Dehyd. vegetables | 2.98 | 1.76 | 1.21 | 5.30 | 3.65 | 2.21 |
| Dry beans | 2.50 | 1.51 | 1.07 | 4.48 | 3.13 | 1.97 |
| Lima beans | 3.68 | 2.19 | 1.51 | 6.56 | 4.53 | 2.76 |
| Mushrooms | 3.01 | 1.78 | 1.22 | 5.36 | 3.68 | 2.22 |

| Subcategory Commodity or Product | Daily Maximum | BOD Daily Average | Annual | Suspended Solids | | |
|---|------------------|----------------------|--------|------------------|------------------|--------|
| | | | | Daily Maximum | Daily Average | Annual |
| Onions (canned) | 3.09 | 1.83 | 1.25 | 5.51 | 3.78 | 2.28 |
| Peas | 2.42 | 1.50 | 1.08 | 4.36 | 3.11 | 2.02 |
| Sauerkraut, canning | 0.50 | 0.30 | 0.21 | 0.89 | 0.63 | 0.40 |
| cutting | 0.08 | 0.05 | 0.04 | 0.14 | 0.11 | 0.08 |
| Snap beans | 1.51 | 0.87 | 0.58 | 2.67 | 1.80 | 1.04 |
| Spinach | 2.37 | 1.36 | 0.91 | 4.19 | 2.81 | 1.64 |
| Squash | 0.90 | 0.59 | 0.46 | 1.64 | 1.23 | 0.87 |
| Potatoes | 0.90 | 0.66 | 0.55 | 1.69 | 1.37 | 1.09 |
| (8) Canned and miscellaneous specialties | | | | | | |
| Added ingredients | 0.95 | 0.55 | 0.36 | 0.00 | 0.00 | 0.00 |
| Baby food | 1.23 | 0.73 | 0.51 | 2.23 | 1.55 | 0.95 |
| Chips, corn | 1.58 | 1.04 | 0.80 | 2.90 | 2.17 | 1.53 |
| potato | 3.46 | 2.17 | 1.58 | 6.25 | 4.49 | 2.97 |
| tortilla | 2.41 | 1.50 | 1.09 | 4.34 | 3.11 | 2.04 |
| Ethnic foods | 2.39 | 1.41 | 0.96 | 4.23 | 2.91 | 1.73 |
| Jams and jellies | 0.42 | 0.26 | 0.19 | 0.76 | 0.54 | 0.36 |
| Mayonnaise and dressings | 0.37 | 0.24 | 0.17 | 0.67 | 0.49 | 0.33 |
| Soups | 4.14 | 2.46 | 1.69 | 7.38 | 5.09 | 3.10 |
| Tomato–starch–cheese canned specialties | 1.37 | 1.08 | 0.72 | 3.31 | 2.23 | 1.30 |

Table 2
BAT Effluent Limitations and Standards of Performance

| Subcategory, Commodity, or Product | Daily Maximum | BOD Daily Average | Annual | Size | Suspended Solids | | |
|-------------------------------------|---------------|-------------------|--------|------|------------------|---------------|--------|
| | | | | | Daily Maximum | Daily Average | Annual |
| (1) Apple juice | 0.2 | 0.1 | na | | 0.2 | 0.1 | na |
| (2) Apple products | 0.2 | 0.1 | na | | 0.2 | 0.1 | na |
| (3) Citrus products | 0.14 | 0.07 | na | | 0.2 | 0.1 | na |
| (4) Frozen potato products | 0.34 | 0.17 | na | | 1.1 | 0.55 | na |
| (5) Dehyd. potato products | 0.34 | 0.17 | na | | 1.1 | 0.55 | na |
| (6) Canned and preserved fruits | | | | | | | |
| Apricots | 1.261 | 0.938 | 0.485 | M | 2.278 | 1.309 | 0.986 |
| | | | | L | 1.261 | 0.938 | 0.485 |
| Caneberries | 0.182 | 0.134 | 0.067 | M | 0.328 | 0.184 | 0.137 |
| | | | | L | 0.182 | 0.134 | 0.067 |
| Cherries, brined | 0.763 | 0.621 | 0.423 | M | 1.438 | 1.013 | 0.872 |
| | | | | L | 0.763 | 0.621 | 0.423 |
| Cherries, sour | 1.102 | 0.839 | 0.472 | M | 2.013 | 1.225 | 0.962 |
| | | | | L | 1.102 | 0.839 | 0.472 |
| Cherries, sweet | 0.448 | 0.337 | 0.181 | M | 0.813 | 0.479 | 0.368 |
| | | | | L | 0.448 | 0.337 | 0.181 |
| Cranberries | 0.620 | 0.465 | 0.248 | M | 1.124 | 0.660 | 0.505 |
| | | | | L | 0.620 | 0.465 | 0.248 |
| Dried fruit | 0.733 | 0.556 | 0.308 | M | 1.337 | 0.805 | 0.627 |
| | | | | L | 0.733 | 0.556 | 0.308 |
| Grape juice, canning | 0.766 | 0.583 | 0.326 | M | 1.399 | 0.849 | 0.666 |
| | | | | L | 0.766 | 0.583 | 0.326 |
| Grape juice, pressing | 0.111 | 0.085 | 0.047 | M | 0.203 | 0.123 | 0.097 |
| | | | | L | 0.111 | 0.085 | 0.047 |
| Olives | 2.285 | 1.606 | 0.796 | M | 3.926 | 2.191 | 1.613 |
| | | | | L | 2.285 | 1.606 | 0.796 |
| Peaches | 0.766 | 0.583 | 0.324 | M | 1.397 | 0.844 | 0.660 |
| | | | | L | 0.766 | 0.583 | 0.324 |
| Pears | 0.855 | 0.664 | 0.397 | M | 1.575 | 1.003 | 0.812 |
| | | | | L | 0.855 | 0.664 | 0.397 |
| Pickles, fresh pack | 0.639 | 0.461 | 0.213 | M | 1.139 | 0.606 | 0.429 |
| | | | | L | 0.639 | 0.461 | 0.213 |
| Pickles, process pack | 0.652 | 0.511 | 0.313 | M | 1.208 | 0.784 | 0.643 |
| | | | | L | 0.652 | 0.511 | 0.313 |
| Pickles, salt station | 0.084 | 0.072 | 0.054 | M | 0.163 | 0.125 | 0.113 |
| | | | | L | 0.084 | 0.072 | 0.054 |
| Pineapples | 1.476 | 1.111 | 0.599 | M | 2.681 | 1.585 | 1.220 |
| | | | | L | 1.476 | 1.111 | 0.599 |
| Plums | 0.283 | 0.204 | 0.095 | M | 0.504 | 0.270 | 0.191 |
| | | | | L | 0.283 | 0.204 | 0.095 |
| Raisins | 0.204 | 0.163 | 0.105 | M | 0.380 | 0.257 | 0.217 |
| | | | | L | 0.204 | 0.163 | 0.105 |
| Strawberries | 0.619 | 0.449 | 0.210 | M | 1.105 | 0.594 | 0.423 |
| | | | | L | 0.619 | 0.449 | 0.210 |
| Tomatoes | 0.524 | 0.378 | 0.173 | M | 0.933 | 0.495 | 0.349 |
| (7) Canned and preserved vegetables | | | | | | | |
| Beets | 0.682 | 0.548 | 0.361 | M | 1.242 | 0.852 | 0.722 |
| | | | | L | 0.682 | 0.548 | 0.361 |
| Broccoli | 1.894 | 1.337 | 0.557 | M | 3.342 | 1.671 | 1.114 |
| | | | | L | 1.894 | 1.337 | 0.557 |
| Carrots | 0.966 | 0.729 | 0.397 | M | 1.756 | 1.046 | 0.809 |
| | | | | L | 0.966 | 0.729 | 0.397 |
| Corn, canned | 0.446 | 0.360 | 0.240 | M | 0.837 | 0.580 | 0.494 |
| | | | | L | 0.446 | 0.360 | 0.240 |
| Corn, frozen | 0.987 | 0.778 | 0.485 | M | 1.832 | 1.204 | 0.994 |
| | | | | L | 0.987 | 0.778 | 0.485 |
| Dehyd. onion and garlic | 1.159 | 0.837 | 0.387 | M | 2.067 | 1.102 | 0.781 |

| Subcategory, Commodity, or Product | Daily Maximum | BOD Daily Average | Annual | Size | Suspended Solids | | |
|--|---------------|-------------------|--------|------|------------------|---------------|--------|
| | | | | | Daily Maximum | Daily Average | Annual |
| | | | | L | 1.159 | 0.837 | 0.387 |
| Dehyd. vegetables | 1.781 | 1.288 | 0.598 | M | 3.178 | 1.699 | 1.206 |
| | | | | L | 1.781 | 1.288 | 0.598 |
| Dry beans | 1.403 | 1.021 | 0.486 | M | 2.509 | 1.363 | 0.981 |
| | | | | L | 1.403 | 1.021 | 0.486 |
| Lima beans | 1.753 | 1.258 | 0.566 | M | 3.117 | 1.633 | 1.138 |
| | | | | L | 1.753 | 1.258 | 0.566 |
| Mushrooms | 1.188 | 0.862 | 0.406 | M | 2.122 | 1.146 | 0.820 |
| | | | | L | 1.188 | 0.862 | 0.406 |
| Onions (canned) | 1.719 | 1.305 | 0.726 | M | 3.135 | 1.893 | 1.480 |
| | | | | L | 1.719 | 1.305 | 0.726 |
| Peas | 0.995 | 0.758 | 0.427 | M | 1.818 | 1.108 | 0.871 |
| | | | | L | 0.995 | 0.758 | 0.427 |
| Sauerkraut, canning | 0.260 | 0.194 | 0.100 | M | 0.470 | 0.270 | 0.202 |
| | | | | L | 0.260 | 0.194 | 0.100 |
| Sauerkraut, cutting | 0.046 | 0.038 | 0.027 | M | 0.087 | 0.064 | 0.056 |
| | | | | L | 0.046 | 0.038 | 0.027 |
| Snap beans | 1.048 | 0.747 | 0.326 | M | 1.858 | 0.955 | 0.653 |
| | | | | L | 1.048 | 0.747 | 0.326 |
| Spinach | 1.176 | 0.830 | 0.346 | M | 2.075 | 1.038 | 0.611 |
| | | | | L | 1.176 | 0.830 | 0.346 |
| Squash | 0.295 | 0.220 | 0.114 | M | 0.534 | 0.307 | 0.232 |
| | | | | L | 0.295 | 0.220 | 0.114 |
| Potatoes | 0.572 | 0.476 | 0.342 | M | 1.090 | 0.803 | 0.707 |
| | | | | L | 0.572 | 0.476 | 0.342 |
| (8) Canned and miscellaneous specialties | | | | | | | |
| Added ingredients | 0.780 | 0.550 | 0.230 | M | 0.000 | 0.000 | 0.000 |
| | | | | L | 0.000 | 0.000 | 0.000 |
| Baby food | 0.839 | 0.611 | 0.290 | M | 1.501 | 0.815 | 0.586 |
| | | | | L | 0.839 | 0.611 | 0.290 |
| Chips, corn | 1.142 | 0.898 | 0.557 | M | 2.117 | 1.386 | 1.143 |
| | | | | L | 1.142 | 0.898 | 0.557 |
| Chips, potato | 1.683 | 1.244 | 0.629 | M | 3.032 | 1.714 | 1.274 |
| | | | | L | 1.683 | 1.244 | 0.629 |
| Chips, tortilla | 1.665 | 1.253 | 0.676 | M | 3.025 | 1.789 | 1.377 |
| | | | | L | 1.665 | 1.253 | 0.676 |
| Ethnic foods | 1.588 | 1.143 | 0.520 | M | 2.826 | 1.491 | 1.046 |
| | | | | L | 1.588 | 1.143 | 0.520 |
| Jams and jellies | 0.187 | 0.142 | 0.080 | M | 0.342 | 0.208 | 0.164 |
| | | | | L | 0.187 | 0.142 | 0.080 |
| Mayonnaise and dressing | 0.210 | 0.163 | 0.097 | M | 0.386 | 0.245 | 0.198 |
| | | | | L | 0.210 | 0.163 | 0.097 |
| Soups | 2.766 | 2.000 | 0.929 | M | 4.934 | 2.638 | 1.872 |
| | | | | L | 2.766 | 2.000 | 0.929 |
| Tomato–starch–cheese canned specialties | 0.981 | 0.705 | 0.319 | M | 1.745 | 0.918 | 0.643 |

Note: The suspended solids limitations and standards for subcategories (6) through (8) in table 2 applicable to discharges from medium and from large size facilities are identified respectively by the letters M and L appearing in the size column. The BOD limitations and standards for subcategories (6) through (8) are applicable to discharges from both medium and large size facilities. Limitations and standards for subcategories (1) through (5) are applicable regardless of facility size.