(b) Under $\S 60.15$, the "fixed capital cost of new components'" includes the fixed capital cost of all depreciable components (except components specified in $\S 60.488$ (a)) which are or will be replaced pursuant to all continuous programs of component replacement which are commenced within any 2year period following the applicability date for the appropriate subpart. (See the "Applicability and designation of affected facility" section of the appropriate subpart.) For purposes of this paragraph, "commenced" means that an owner or operator has undertaken a continuous program of component replacement or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of component replacement.
[49 FR 22608, May 30, 1984]

## § 60.489 List of chemicals produced by affected facilities.

The following chemicals are produced, as intermediates or final products, by process units covered under this subpart. The applicability date for process units producing one or more of these chemicals is J anuary 5, 1981.

| CAS No. ${ }^{\text {a }}$ | Chemical |
| :---: | :---: |
| 105-57-7 ........... | Acetal. |
| 75-07-0 ............ | Acetaldehyde. |
| 107-89-1 ........... | Acetaldol. |
| 60-35-5 .... | Acetamide. |
| 103-84-4 ...... | Acetanilide. |
| 64-19-7 .... | Acetic acid. |
| 108-24-7 ... | Acetic anhydride. |
| 67-64-1 ............. | Acetone. |
| 75-86-5 ............ | Acetone cyanohydrin. |
| 75-05-8 ... | Acetonitrile. |
| 98-86-2 ............. | Acetophenone. |
| 75-36-5 ............ | Acetyl chloride. |
| 74-86-2 ............ | Acetylene. |
| 107-02-8 ........... | Acrolein. |
| 79-06-1 ........... | Acrylamide. |
| 79-10-7 ............ | Acrylic acid. |
| 107-13-1.. | Acrylonitrile. |
| 124-04-9 .......... | Adipic acid. |
| 111-69-3 | Adiponitrile. |
| (b) | Alkyl naphthalenes. |
| 107-18-6 ........... | Allyl alcohol. |
| 107-05-1 ........... | Allyl chloride. |
| 1321-11-5 ......... | Aminobenzoic acid. |
| 111-41-1 ........ | Aminoethylethanolamine. |
| 123-30-8 ........... | p-Aminophenol. |
| $\begin{aligned} & \text { 628-63-7, 123- } \\ & 92-2 . \end{aligned}$ | Amyl acetates. |
| 71-41-0 c .......... | Amyl alcohols. |
| 110-58-7 .......... | Amyl amine. |
| 543-59-9 .......... | Amyl chloride. |
| 110-66-7 c ......... | Amyl mercaptans. |
| 1322-06-1 ......... | Amyl phenol. |
| 62-53-3 ............ | Aniline. |


| CAS No. ${ }^{\text {a }}$ | Chemical |
| :---: | :---: |
| 108-39-4 ...... | m-cresol. |
| 95-48-7 | o-cresol. |
| 106-44-5 ..... | p-cresol. |
| 1319-77-3 ....... | Mixed cresols. |
| 1319-77-3 ......... | Cresylic acid. |
| 4170-30-0 ..... | Crotonaldehyde. |
| 3724-65-0 ......... | Crotonic acid. |
| 98-82-8 | Cumene. |
| 80-15-9 | Cumene hydroperoxide. |
| 372-09-8. | Cyanoacetic acid. |
| 506-77-4 ........... | Cyanogen chloride. |
| 108-80-5 .. | Cyanuric acid. |
| 108-77-0 .. | Cyanuric chloride. |
| 110-82-7 .... | Cyclohexane. |
| 108-93-0 | Cyclohexanol. |
| 108-94-1 .... | Cyclohexanone. |
| 110-83-8 | Cyclohexene. |
| 108-91-8 ... | Cyclohexylamine. |
| 111-78-4 . | Cyclooctadiene. |
| 112-30-1 ........... | Decanol. |
| 123-42-2 ....... | Diacetone alcohol. |
| 27576-04-1 ..... | Diaminobenzoic acid. |
| $\begin{aligned} & 95-76-1,95-82- \\ & 9,554-00-7, \\ & 608-27-5, \\ & 608-31-1, \\ & 626-43-7, \\ & 27134-27-6, \\ & 57311-92-9 \mathrm{c} . \end{aligned}$ | Dichloroaniline. |
| 541-73-1 ......... | m-dichlorobenzene. |
| 95-50-1 ............. | o-dichlorobenzene. |
| 106-46-7 .. | p-dichlorobenzene. |
| 75-71-8 | Dichlorodifluoromethane. |
| 111-44-4. | Dichloroethyl ether. |
| 107-06-2 | 1,2-dichloroethane (EDC). |
| 96-23-1 ........... | Dichlorohydrin. |
| 26952-23-8 ....... | Dichloropropene. |
| 101-83-7 ........... | Dicyclohexylamine. |
| 109-89-7 ........... | Diethylamine. |
| 111-46-6 ........... | Diethylene glycol. |
| 112-36-7 .. | Diethylene glycol diethyl ether. |
| 111-96-6 ........... | Diethylene glycol dimethyl ether. |
| 112-34-5 ........... | Diethylene glycol monobutyl ether. |
| 124-17-4 ........... | Diethylene glycol monobutyl ether acetate. |
| 111-90-0 ......... | Diethylene glycol monoethyl ether. |
| 112-15-2 ........... | Diethylene glycol monoethyl ether acetate. |
| 111-77-3 ........ | Diethylene glycol monomethyl ether. |
| 64-67-5 .. | Diethyl sulfate. |
| 75-37-6 | Difluoroethane. |
| 25167-70-8 | Diisobutylene. |
| 26761-40-0 | Diisodecyl phthalate. |
| 27554-26-3 | Diisooctyl phthalate. |
| 674-82-8 ........... | Diketene. |
| 124-40-3 ........... | Dimethylamine. |
| 121-69-7.. | N,N-dimethylaniline. |
| 115-10-6 .... | $\mathrm{N}, \mathrm{N}$-dimethyl ether. |
| 68-12-2 ... | $\mathrm{N}, \mathrm{N}$-dimethylformamide. |
| 57-14-7 ............. | Dimethylhydrazine. |
| 77-78-1 ...... | Dimethyl sulfate. |
| 75-18-3 | Dimethyl sulfide. |
| 67-68-5 | Dimethyl sulfoxide. |
| 120-61-6 ........... | Dimethyl terephthalate. |
| 99-34-3 ............. | 3,5-dinitrobenzoic acid. |
| 51-28-5 ............. | Dinitrophenol. |
| 25321-14-6 ....... | Dinitrotoluene. |
| 123-91-1 ........... | Dioxane. |
| 646-06-0 ........... | Dioxilane. |
| 122-39-4 ........... | Diphenylamine. |
| 101-84-8 ........... | Diphenyl oxide. |
| 102-08-9 ........... | Diphenyl thiourea. |
| 25265-71-8 ....... | Dipropylene glycol. |
| 25378-22-7 ....... | Dodecene. |


| CAS No. ${ }^{\text {a }}$ | Chemical |
| :---: | :---: |
| 28675-17-4 ..... | Dodecylaniline. |
| 27193-86-8 ...... | Dodecylphenol. |
| 106-89-8 ........ | Epichlorohydrin. |
| 64-17-5 | Ethanol. |
| 141-43-5 c ........ | Ethanolamines. |
| 141-78-6 .......... | Ethyl acetate. |
| 141-97-9 | Ethyl acetoacetate. |
| 140-88-5 .. | Ethyl acrylate. |
| 75-04-7 | Ethylamine. |
| 100-41-4 .. | Ethylbenzene. |
| 74-96-4 ... | Ethyl bromide. |
| 9004-57-3 ......... | Ethylcellulose. |
| 75-00-3 ............ | Ethyl chloride. |
| 105-39-5 .. | Ethyl chloroacetate. |
| 105-56-6 | Ethylcyanoacetate. |
| 74-85-1 | Ethylene. |
| 96-49-1 | Ethylene carbonate. |
| 107-07-3 | Ethylene chlorohydrin. |
| 107-15-3 | Ethylenediamine. |
| 106-93-4 | Ethylene dibromide. |
| 107-21-1 ... | Ethylene glycol. |
| 111-55-7 | Ethylene glycol diacetate. |
| 110-71-4 | Ethylene glycol dimethyl ether. |
| 111-76-2 ........... | Ethylene glycol monobutyl ether. |
| 112-07-2 ........... | Ethylene glycol monobutyl ether acetate. |
| 110-80-5 ........... | Ethylene glycol monoethyl ether. |
| 111-15-9 | Ethylene glycol monethyl ether acetate. |
| 109-86-4 | Ethylene glycol monomethyl ether. |
| 110-49-6 ........... | Ethylene glycol monomethyl ether acetate. |
| 122-99-6 ........... | Ethylene glycol monophenyl ether. |
| 2807-30-9 ......... | Ethylene glycol monopropyl ether. |
| 75-21-8 ............ | Ethylene oxide. |
| 60-29-7 | Ethyl ether |
| 104-76-7 | 2-ethylhexanol. |
| 122-51-0 ........... | Ethyl orthoformate. |
| 95-92-1 ............ | Ethyl oxalate. |
| 41892-71-1 ....... | Ethyl sodium oxalacetate. |
| 50-00-0 ............. | Formaldehyde. |
| 75-12-7 ............. | Formamide. |
| 64-18-6 | Formic acid. |
| 110-17-8 ........... | Fumaric acid. |
| 98-01-1 .... | Furfural. |
| 56-81-5 | Glycerol. |
| 26545-73-7 ....... | Glycerol dichlorohydrin. |
| 25791-96-2 ....... | Glycerol triether. |
| 56-40-6 ............. | Glycine. |
| 107-22-2 .. | Glyoxal. |
| 118-74-1 .. | Hexachlorobenzene. |
| 67-72-1 ............. | Hexachloroethane. |
| 36653-82-4 | Hexadecyl alcohol. |
| 124-09-4 ........... | Hexamethylenediamine. |
| 629-11-8 ........... | Hexamethylene glycol. |
| 100-97-0 ........... | Hexamethylenetetramine. |
| 74-90-8 ............. | Hydrogen cyanide. |
| 123-31-9 ........... | Hydroquinone. |
| 99-96-7 ............. | p-hydroxybenzoic acid. |
| 26760-64-5 ........ | Isoamylene. |
| 78-83-1 ............. | Isobutanol. |
| 110-19-0 ........... | Isobutyl acetate. |
| 115-11-7 ........... | Isobutylene. |
| 78-84-2 ............. | Isobutyraldehyde. |
| 79-31-2 ............. | Isobutyric acid. |
| 25339-17-7 ....... | Isodecanol. |
| 26952-21-6 ........ | Isooctyl alcohol. |
| 78-78-4 . | Isopentane. |
| 78-59-1 | Isophorone. |
| 121-91-5 | Isophthalic acid. |
| 78-79-5 | Isoprene. |
| 67-63-0 ............. | Isopropanol. |
| 108-21-4 ........... | Isopropyl acetate. |
| 75-31-0 ............. | Isopropylamine. |
| 75-29-6 ............. | Isopropyl chloride. |
| 25168-06-3 ....... | Isopropylphenol. |


| CAS No. ${ }^{\text {a }}$ | Chemical |
| :---: | :---: |
| 463-51-4 ........... | Ketene. |
| (b) | Linear alkyl sulfonate. |
| 123-01-3 ........... | Linear alkylbenzene (linear dodecylbenzene). |
| 110-16-7 ........... | Maleic acid. |
| 108-31-6 ........... | Maleic anhydride. |
| 6915-15-7 ......... | Malic acid. |
| 141-79-7 ........... | Mesityl oxide. |
| 121-47-1 ........... | Metanilic acid. |
| 79-41-4 ............. | Methacrylic acid. |
| 563-47-3 ........... | Methallyl chloride. |
| 67-56-1 ............. | Methanol. |
| 79-20-9 ............. | Methyl acetate. |
| 105-45-3 ........... | Methyl acetoacetate. |
| 74-89-5 | Methylamine. |
| 100-61-8 .. | n -methylaniline. |
| 74-83-9 | Methyl bromide. |
| 37365-71-2 ....... | Methyl butynol. |
| 74-87-3 .. | Methyl chloride. |
| 108-87-2 | Methylcyclohexane. |
| 1331-22-2 | Methylcyclohexanone. |
| 75-09-2 ... | Methylene chloride. |
| 101-77-9 ........... | Methylene dianiline. |
| 101-68-8 ........... | Methylene diphenyl diisocyanate. |
| 78-93-3 ... | Methyl ethyl ketone. |
| 107-31-3 ........... | Methyl formate. |
| 108-11-2 ........... | Methyl isobutyl carbinol. |
| 108-10-1 ........... | Methyl isobutyl ketone. |
| 80-62-6 ............. | Methyl methacrylate. |
| 77-75-8 | Methylpentynol. |
| 98-83-9 | a-methylstyrene. |
| 110-91-8 ........... | Morpholine. |
| 85-47-2 ............. | a-naphthalene sulfonic acid. |
| 120-18-3 ........... | b-naphthalene sulfonic acid. |
| 90-15-3 ............. | a-naphthol. |
| 135-19-3 ........... | b-naphthol. |
| 75-98-9. | Neopentanoic acid. |
| 88-74-4 ............. | o-nitroaniline. |
| 100-01-6 ..... | p-nitroaniline. |
| 91-23-6 ............. | o-nitroanisole. |
| 100-17-4 ........... | p-nitroanisole. |
| 98-95-3 ...... | Nitrobenzene. |
| 27178-83-2 ${ }^{\text {c }}$...... | Nitrobenzoic acid (o,m, and p). |
| 79-24-3 ............. | Nitroethane. |
| 75-52-5 ............. | Nitromethane. |
| 88-75-5 ............. | 2-Nitrophenol. |
| 25322-01-4 ....... | Nitropropane. |
| 1321-12-6 ......... | Nitrotoluene. |
| 27215-95-8 ....... | Nonene. |
| 25154-52-3 ....... | Nonylphenol. |
| 27193-28-8 ....... | Octylphenol. |
| 123-63-7 ........... | Paraldehyde. |
| 115-77-5 ........... | Pentaerythritol. |
| 109-66-0 ........... | n-pentane. |
| 109-67-1 ........... | 1-pentene |
| 127-18-4 ........... | Perchloroethylene. |
| 594-42-3 ........... | Perchloromethyl mercaptan. |
| 94-70-2 ............. | o-phenetidine. |
| 156-43-4 ........... | p -phenetidine. |
| 108-95-2 ........... | Phenol. |
| $\begin{aligned} & 98-67-9,585- \\ & 38-6,609-46- \\ & 1,1333-39-7 \mathrm{c} . \end{aligned}$ | Phenolsulfonic acids. |
| 91-40-7 ............. | Phenyl anthranilic acid. |
| (b) ...................... | Phenylenediamine. |
| 75-44-5 ............. | Phosgene. |
| 85-44-9 ............. | Phthalic anhydride. |
| 85-41-6 ............. | Phthalimide. |
| 108-99-6 ........... | b-picoline. |
| 110-85-0 ........... | Piperazine. |
| $\begin{aligned} & 9003-29-6, \\ & 25036-29-7 \mathrm{c} . \end{aligned}$ | Polybutenes. |
| 25322-68-3 ........ | Polyethylene glycol. |
| 25322-69-4 ....... | Polypropylene glycol. |


| CAS No. ${ }^{\text {a }}$ | Chemical |
| :---: | :---: |
| 123-38-6 | Propionaldehyde. |
| 79-09-4 | Propionic acid. |
| 71-23-8 | n-propyl alcohol. |
| 107-10-8 | Propylamine. |
| 540-54-5 . | Propyl chloride. |
| 115-07-1. | Propylene. |
| 127-00-4 | Propylene chlorohydrin. |
| 78-87-5 | Propylene dichloride. |
| 57-55-6. | Propylene glycol. |
| 75-56-9 .. | Propylene oxide. |
| 110-86-1 | Pyridine. |
| 106-51-4 | Quinone. |
| 108-46-3 | Resorcinol. |
| 27138-57-4 | Resorcylic acid. |
| 69-72-7 | Salicylic acid. |
| 127-09-3 | Sodium acetate. |
| 532-32-1 | Sodium benzoate. |
| 9004-32-4 | Sodium carboxymethyl cellulose. |
| 3926-62-3 | Sodium chloroacetate. |
| 141-53-7 | Sodium formate. |
| 139-02-6 | Sodium phenate. |
| 110-44-1 ........... | Sorbic acid. |
| 100-42-5 | Styrene. |
| 110-15-6 . | Succinic acid. |
| 110-61-2 | Succinonitrile. |
| 121-57-3 | Sulfanilic acid. |
| 126-33-0 | Sulfolane. |
| 1401-55-4. | Tannic acid. |
| 100-21-0 | Terephthalic acid. |
| 79-34-5 | Tetrachloroethanes. |
| 117-08-8 | Tetrachlorophthalic anhydride. |
| 78-00-2 | Tetraethyl lead. |
| 119-64-2 | Tetrahydronaphthalene. |
| 85-43-8 | Tetrahydrophthalic anhydride. |
| 75-74-1 | Tetramethyl lead. |
| 110-60-1 | Tetramethylenediamine. |
| 110-18-9 | Tetramethylethylenediamine. |
| 108-88-3 | Toluene. |
| 95-80-7 | Toluene-2,4-diamine. |
| 584-84-9 | Toluene-2,4-diisocyanate. |
| 26471-62-5 ........ | Toluene diisocyanates (mixture). |
| 1333-07-9 .. | Toluenesulfonamide. |
| 104-15-4 c ......... | Toluenesulfonic acids. |
| 98-59-9 | Toluenesulfonyl chloride. |
| 26915-12-8 | Toluidines. |
| $\begin{aligned} & 87-61-6,108- \\ & 70-3,120-82- \\ & 1 \mathrm{c} . \end{aligned}$ | Trichlorobenzenes. |
| 71-55-6.. | 1,1,1-trichloroethane. |
| 79-00-5 .. | 1,1,2-trichloroethane. |
| 79-01-6 .. | Trichloroethylene. |
| 75-69-4 ............. | Trichlorofluoromethane. |
| 96-18-4 | 1,2,3-trichloropropane. |
| 76-13-1 | 1,1,2-trichloro-1,2,2-trifluoroethane. |
| 121-44-8.. | Triethylamine. |
| 112-27-6 ........... | Triethylene glycol. |
| 112-49-2 | Triethylene glycol dimethyl ether. |
| 7756-94-7 ......... | Triisobutylene. |
| 75-50-3 .. | Trimethylamine. |
| 57-13-6 ............. | Urea. |
| 108-05-4 ........... | Vinyl acetate. |
| 75-01-4 ............. | Vinyl chloride. |
| 75-35-4 ............. | Vinylidene chloride. |
| 25013-15-4 ........ | Vinyl toluene. |
| 1330-20-7 ......... | Xylenes (mixed). |
| 95-47-6 ............. | o-xylene. |
| 106-42-3 ........... | p -xylene. |
| 1300-71-6 ......... | Xylenol. |
| 1300-73-8 ......... | Xylidine. |
| a CAS numbers refer to the Chemical Abstracts Registry numbers assigned to specific chemicals, isomers, or mixtures of chemicals. Some isomers or mixtures that are covered by the standards do not have CAS numbers assigned to them. The standards apply to all of the chemicals listed, whether CAS numbers have been assigned or not. |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

${ }^{\mathrm{b}}$ No CAS number(s) have been assigned to this chemical, its isomers, or mixtures containing these chemicals.
${ }^{\text {c }}$ CAS numbers for some of the isomers are listed; the standards apply to all of the isomers and mixtures, even CAS numbers have not been assigned
[48 FR 48335, Oct. 18, 1983, as amended at 65 F R 61763, Oct. 17, 2000]

## Subpart WW-Standards of Performance for the Beverage Can Surface Coating Industry

Source: 48 FR 38737, Aug. 25, 1983, unless otherwise noted.

## § 60.490 Applicability and designation of affected facility.

(a) The provisions of this subpart apply to the following affected facilities in beverage can surface coating lines: each exterior base coat operation, each overvarnish coating operation, and each inside spray coating operation.
(b) The provisions of this subpart apply to each affected facility which is identified in paragraph (a) of this section and commences construction, modification, or reconstruction after November 26, 1980.

## §60.491 Definitions.

(a) All terms which are used in this subpart and are not defined below are given the same meaning as in the Act and subpart A of this part.
(1) Beverage can means any two-piece steel or aluminum container in which soft drinks or beer, including malt liquor, are packaged. The definition does not include containers in which fruit or vegetable juices are pack aged.
(2) Exterior base coating operation means the system on each beverage can surface coating line used to apply a coating to the exterior of a two-piece beverage can body. The exterior base coat provides corrosion resistance and a background for lithography or printing operations. The exterior base coat operation consists of the coating application station, flashoff area, and curing oven. The exterior base coat may be pigmented or clear (unpigmented).
(3) Inside spray coating operation means the system on each beverage can surface coating line used to apply a coating to the interior of a two-piece
beverage can body. This coating provides a protective film between the contents of the beverage can and the metal can body. The inside spray coating operation consists of the coating application station, flashoff area, and curing oven. Multiple applications of an inside spray coating are considered to be a single coating operation.
(4) Overvarnish coating operation means the system on each beverage can surface coating line used to apply a coating over ink which reduces friction for automated beverage can filling equipment, provides gloss, and protects the finished beverage can body from abrasion and corrosion. The overvarnish coating is applied to two-piece beverage can bodies. The overvarnish coating operation consists of the coating application station, flashoff area, and curing oven.
(5) Two-piece can means any beverage can that consists of a body manufactured from a single piece of steel or aluminum and a top. Coatings for a two-piece can are usually applied after fabrication of the can body.
(6) VOC content means all volatile organic compounds (VOC) that are in a coating. VOC content is expressed in terms of kilograms of VOC per liter of coating solids.
(b) Notations used under §60.493 of this subpart are defined below:
$C_{a}=$ the VOC concentration in each gas stream leaving the control device and entering the atmosphere (parts per million as carbon)
$\mathrm{C}_{\mathrm{b}}$ =the VOC concentration in each gas stream entering the control device (parts per million as carbon)
$\mathrm{D}_{\mathrm{c}}=$ density of each coating, as received (kilograms per liter)
$D_{d}=$ density of each VOC-solvent added to coatings (kilograms per liter)
$\mathrm{D}_{\mathrm{r}}=$ density of VOC-solvent recovered by an emission control device (kilograms per liter)
$\mathrm{E}=\mathrm{V} O C$ destruction efficiency of the control device (fraction)
$F=$ the proportion of total VOC emitted by an affected facility which enters the control device to total emissions (fraction)
$G=$ the volume-weighted average of VOC in coatings consumed in a calendar month per volume of coating solids applied (kilograms per liter of coating solids)
$H_{e}=$ the fraction of VOC emitted at the coater and flashoff areas captured by a collection system

