Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of silver powder produced English units—pounds per 1,000,000 pounds of silver powder produced	
Chromium	0.67	0.29
Mercury	0.42	0.18
Silver	0.67	0.29
Zinc	0.13	0.06
Manganese	0.96	0.74

(b) There shall be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed above.

[49 FR 9134, Mar. 9, 1984; 49 FR 13879, Apr. 9, 1984]

PART 463—PLASTICS MOLDING AND FORMING POINT SOURCE CATEGORY

GENERAL PROVISIONS

Subpart A—Contact Cooling and Heating Water Subcategory

Subpart B—Cleaning Water Subcategory

Subpart C—Finishing Water Subcategory

AUTHORITY: Secs. 301, 304 (b), (c), (e), and (g), 306 (b) and (c), 307, 308, and 501, Clean Water Act (Federal Water Pollution Control Act Amendments of 1972, as amended by Clean Water Act of 1977) (the ''Act''); 33 U.S.C. 1311, 1314 (b), (c), (e) and (g), 1316 (b) and (c), 1317 (b) and (c), 1318, and 1361; 86 Stat. 816, Pub. L. 92–500; 91 Stat. 1567, Pub. L. 95–217.

SOURCE: 49 FR 49047, Dec. 17, 1984, unless otherwise noted.

GENERAL PROVISIONS

§ 463.1 Applicability.

(a) This part applies to any plastics molding and forming process that discharges or may discharge pollutants to waters of the United States or that introduces pollutants into a publicly owned treatment works. Plastics molding and forming processes include processes that blend, mold, form, or otherwise process plastic materials into intermediate or final plastic products. They include commonly recognized processes such as extrusion, molding, coating and laminating, thermoforming, calendering, casting, foaming, cleaning, and finishing.

(b) Plastics molding and forming processes (e.g., extrusion and pelletizing) used by plastics resin manufacturers to process crude intermediate plastic material for shipment offsite are excluded from this regulation and regulated under the organic chemicals, plastics, and synthetic fibers category. Plastics molding and forming processes used by plastic resin manufacturers to process crude intermediate plastic materials, which are further processed on-site into intermediate or final plastics products in molding and forming processes, are controlled by the effluent limitations guidelines and standards for the plastics molding and forming category in this part.

(c) Processes that coat a plastic material onto a substrate may fall within the definition of electroplating and metal finishing as defined in 40 CFR parts 413 and 433. These coating processes are excluded from the effluent limitations guidelines and standards for the electroplating and metal finishing point source categories and are subject to the plastics molding and forming regulation in this part.

(d) Coating of plastic material onto a formed metal substrate is also covered by the plastics molding and forming effluent limitations guidelines and standards and is not covered by the specific metal forming guidelines such as aluminum forming (40 CFR part 467), copper forming (40 CFR part 468), and nonferrous metals forming (40 CFR part 471). However, the plastics molding and forming effluent limitations guidelines and standards in this part apply only to the coating process; the metal forming operations are subject to the specific metal forming regulation.

(e) Research and development laboratories that produce plastic products using a plastics molding and forming process are subject to the effluent limitations guidelines and standards in this part if the plastics molding and forming process discharges process water. The mass of plastic product produced in the plastics molding and forming process is not considered when determining the applicability of the plastics molding and forming regulation in this part to plastics molding and forming processes at research and development laboratories.

(f) Chemical and thermal reticulation processes for polyurethane foam are not subject to the effluent limitations guidelines and standards in this part. Water used in those processes is not considered to be process water as defined in this regulation. Processes used to further mold or form the reticulated foam are subject, however, to this regulation if they discharge process water.

(g) Processes used to regenerate cellulose and to produce a product (e.g., rayon) from the regenerated cellulose are not subject to the effluent limitations guidelines and standards in this part. Processes that mold or form cellulose derivatives (e.g., cellulose acetate) are subject to the effluent limitations guidelines and standards in this part if they discharge process water.

[49 FR 49047, Dec. 17, 1984; 50 FR 18249, Apr. 30, 1985]

§ 463.2 General definitions.

In addition to the definitions set forth in 40 CFR part 401, the following definitions apply to this part:

(a) ''Plastics molding and forming'' is a manufacturing process in which plastic materials are blended, molded, formed, or otherwise processed into intermediate or final products.

(b) ''Process water'' is any raw, service, recycled, or reused water that contacts the plastic product or contacts shaping equipment surfaces such as molds and mandrels that are, or have been, in contact with the plastic product.

(c) ''Contact cooling and heating water'' is process water that contacts the raw materials or plastic product for the purpose of heat transfer during the plastics molding and forming process.

(d) ''Cleaning water'' is process water used to clean the surface of an intermediate or final plastic product or to clean the surfaces of equipment used in plastics molding and forming that contact an intermediate or final plastic product. It includes water used in both the detergent wash and rinse cycles of a cleaning process.

(e) ''Finishing'' water is processed water used to remove waste plastic material generated during a finishing process or to lubricate a plastic product during a finishing process. It includes water used to machine or to assemble intermediate or final plastic products.

(f) ''Plastic material'' is a synthetic organic polymer (i.e., a thermoset polymer, a thermoplastic polymer, or a combination of a natural polymer and a thermoset or thermoplastic polymer) that is solid in its final form and that was shaped by flow. The material can be either a homogeneous polymer or a polymer combined with fillers, plasticizers, pigments, stabilizers, or other additives.

(g) ''Crude intermediate plastic material'' is plastic material formulated in an on-site polymerization process.

(h) ''Mass of pollutant that can be discharged'' is the pollutant mass calculated by multiplying the pollutant concentration times the average process water usage flow rate.

§ 463.3 Monitoring and reporting requirements.

The ''monthly average'' regulatory values shall be the basis for the monthly average effluent limitations guidelines and standards in direct discharge permits. Compliance with the monthly average effluent limitations guidelines and standards is required regardless of the number of samples analyzed and averaged.

Subpart A—Contact Cooling and Heating Water Subcategory

§ 463.10 Applicability; description of the contact cooling and heating water subcategory.

This subpart applies to discharges of pollutants from processes in the contact cooling and heating water subcategory to waters of the United States and the introduction of such pollutants into publicly owned treatment works. Processes in the contact cooling and heating water subcategory are processes where process water comes in contact with plastic materials or plastic products for the purpose of heat transfer during plastics molding and forming.

§ 463.11 Specialized definitions.

For the purpose of this subpart:

(a) The ''average process water usage flow rate'' of a contact cooling and heating water process in liters per day is equal to the volume of process water (liters) used per year by a process divided by the number of days per year the process operates. The ''average process water usage flow rate'' for a plant with more than one plastics molding and forming process that uses contact cooling and heating water is the sum of the ''average process water usage flow rates'' for the contact cooling and heating processes.

(b) The ''volume of process water used per year'' is the volume of process water that flows through a contact cooling and heating water process and comes in contact with the plastic product over a period of one year.

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

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the effluent limitations guidelines (i.e., mass of pollutant discharged) representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available,

which are calculated by multiplying the average process water usage flow rate for the contact cooling and heating water processes at a point source times the following pollutant concentrations:

SUBPART A
[Contact cooling and heating water]

Concentration used to calculate BPT effluent limitations	
Pollutant or pollutant property	Maximum for any 1 day (mg/l)
BOD*5*	26
Oil and grease	29
TSS	19
pH	(1)

1 Within the range of 6.0 to 9.0 at all times.

The permit authority will obtain the average process water usage flow rate for the contact cooling and heating water processes from the permittee.

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

(a) The BAT effluent limitations guidelines for bis(2-ethylhexyl) phthalate are reserved.

(b) The Agency has determined that, with the exception of bis(2-ethylhexyl) phthalate, there are no toxic pollutants in treatable concentrations in contact cooling and heating water. Accordingly, the Agency is promulgating BAT effluent limitations guidelines equal to the BPT effluent limitations guidelines.

§ 463.14 New source performance standards.

(a) NSPS for bis(2-ethylhexyl) phthalate are reserved.

(b) Any new source subject to this subpart must achieve performance standards (i.e., mass of pollutant discharged), which are calculated by multiplying the average process water usage flow rate for the contact cooling and heating water processes at a new source times the following pollutant concentrations:

SUBPART A
[Contact cooling and heating water]

Concentration used to calculate NSPS	
Pollutant or pollutant property	Maximum for any 1 day (mg/l)
BOD*5*	26
Oil and grease	29
TSS	19
pH	(1)

1 Within the range of 6.0 to 9.0 at all times.

The permit authority will obtain the average process water usage flow rate for the new source contact cooling and heating water processes from the permittee.

§ 463.15 Pretreatment standards for existing sources.

(a) PSES for bis(2-ethylhexyl) phthalate are reserved.

(b) Any existing source subject to this subpart that introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403—General Pretreatment Regulations.

§ 463.16 Pretreatment standards for new sources.

(a) PSNS for bis(2-ethylhexyl)phthalate are reserved.

(b) Any new source subject to this subpart that introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403—General Pretreatment Regulations.

§ 463.17 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the effluent limitations guidelines (i.e., mass of pollutant discharged) representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology, which are calculated by multiplying the average process water usage flow rate for the contact cooling and heating water processes at a point source times the following pollutant concentrations:

SUBPART A
[Contact cooling and heating water]

Concentration used to calculate BCT effluent limitations	
Pollutant or pollutant property	Maximum for any 1 day (mg/l)
BOD*5*	26
Oil and grease	29
TSS	19
pH	(1)

1 Within the range of 6.0 to 9.0 at all times.

The permit authority will obtain the average process water usage flow rate for the contact cooling and heating water processes from the permittee.

Subpart B—Cleaning Water Subcategory

§ 463.20 Applicability; description of the cleaning water subcategory.

This subpart applies to discharges of pollutants from processes in the cleaning water subcategory to waters of the United States and the introduction of such pollutants into publicly owned treatment works. Processes in the cleaning water subcategory are processes where water comes in contact with the plastic product for the purpose of cleaning the surface of the product and where water comes in contact with shaping equipment, such as molds and mandrels, that contact the plastic material for the purpose of cleaning the equipment surfaces.

§ 463.21 Specialized definitions.

For the purpose of this subpart:

(a) The ''average process water usage flow rate'' of a cleaning water process in liters per day is equal to the volume of process water (liters) used per year by a process divided by the number of days per year the process operates. The ''average process water usage flow rate'' for a plant with more than one plastics molding and forming process that uses cleaning water is the sum of the ''average process water usage flow rates'' for the cleaning processes.

(b) The ''volume of process water used per year'' is the volume of process water that flows through a cleaning process and comes in contact with the plastic product over a period of one year.

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

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the effluent limitations guidelines (i.e., mass of pollutant discharged) representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available, which are calculated by multiplying the average process water usage flow rate for the cleaning water processes at a point source times the following pollutant concentrations:

SUBPART B
[Cleaning water]

Concentration used to calculate BPT effluent limitations		
Pollutant or pollutant property	Maximum for any 1 day (mg/l)	Maximum for monthly average (mg/l)
BOD*5*	49	22
Oil and grease	71	17
TSS	117	36
pH	(1)	(1)

1 Within the range of 6.0 to 9.0 at all times.

The permit authority will obtain the average process water usage flow rate for the cleaning water processes from the permittee.

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

The Agency has determined that there are insignificant quantities of toxic pollutants in cleaning process wastewaters after compliance with applicable BPT effluent limitations guidelines. Accordingly, because the BPT level of treatment provides adequate control, the Agency is establishing BAT effluent limitations guidelines equal to the BPT effluent limitations guidelines.

§ 463.24 New source performance standards.

Any new source subject to this subpart must achieve performance standards (i.e., mass of pollutant discharged)

calculated by multiplying the average process water usage flow rate for cleaning processes at a new source times the following pollutant concentrations:

SUBPART B

[Cleaning water]

Concentration used to calculate NSPS		
Pollutant or pollutant property	Maximum for any 1 day (mg/l)	Maximum for monthly average (mg/l)
BOD*5*	49	22
Oil and Grease	71	17
TSS	117	36
pH	(1)	(1)

[1] Within the range of 6.0 to 9.0 at all times.

The permit authority will obtain the average process water usage flow rate for the new source cleaning water processes from the permittee.

§ 463.25 Pretreatment standards for existing sources.

Any existing source subject to this subpart that introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403—General Pretreatment Regulations.

§ 463.26 Pretreatment for new sources.

Any new source subject to this subpart that introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403—General Pretreatment Regulations.

§ 463.27 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology. [Reserved]

Subpart C—Finishing Water Subcategory

§ 463.30 Applicability; description of the finishing water subcategory.

This subpart applies to discharges of pollutants from processes in the finishing water subcategory to waters of the United States and the introduction of such pollutants into publicly owned treatment works. Processes in the finishing water subcategory are processes where water comes in contact with the plastic product during finishing.

§ 463.31 Specialized definitions.

For the purpose of this subpart:

(a) The ''average process water usage flow rate'' of a finishing water process in liters per day is equal to the volume of process water (liters) used per year by a process divided by the number of days per year the process operates. The ''average process water usage flow rate'' for a plant with more than one plastics molding and forming process that uses finishing water is the sum of the ''average process water usage flow rates'' for the finishing processes.

(b) The ''volume of process water used per year'' is the volume of process water that flows through a finishing water process and comes in contact with the plastics product over a period of one year.

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

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the effluent limitations guidelines (i.e., mass of pollutant discharged) representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available, which are calculated by multiplying the average process water usage flow rate for the finishing water processes at a point source times the following pollutant concentrations:

SUBPART C

[Finishing water]

Concentration used to calculate BPT effluent limitations		
Pollutant or pollutant property	Maximum for any 1 day (mg/l)	Maximum for monthly average (mg/l)
TSS	130	37
pH	(1)	(1)

[1] Within the range of 6.0 to 9.0 at all times.

The permit authority will obtain the average process water usage flow rate for the finishing water processes from the permittee.

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

(a) The BAT effluent limitations guidelines for bis(2-ethylhexyl) phthalate, di-n-butyl phthalate, and dimethyl phthalate are reserved.

(b) The Agency has determined that, with the exception of bis(2-ethylhexyl) phthalate, di-n-butyl phthalate, and dimethyl phthalate, there are no toxic pollutants in treatable concentrations in finishing waters. Accordingly, the Agency is promulgating BAT effluent limitations guidelines equal to BPT effluent limitations guidelines.

§ 463.34 New source performance standards.

(a) NSPS for bis(2-ethylhexyl) phthalate, di-n-butyl phthalate, and dimethyl phthalate are reserved.

(b) Any new source subject to this subpart must achieve performance standards (i.e., mass of pollutant discharged), which are calculated by multiplying the average process water usage flow rate for the finishing water processes at a new source times the following pollutant concentrations:

SUBPART C

[Finishing water]

Concentration used to calculate NSPS		
Pollutant or pollutant property	Maximum for any 1 day (mg/l)	Maximum for monthly average (mg/l)
TSS	130	37
pH	(1)	(1)

[1] Within the range of 6.0 to 9.0 at all times.

The permit authority will obtain the average process water usage flow rate for the new source finishing water processes from the permittee.

§ 463.35 Pretreatment standards for existing sources.

(a) PSES for bis(2-ethylhexyl) phthalate, di-n-butyl phthalate, and dimethyl phthalate are reserved.

(b) Any existing source subject to this subpart that introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403—General Pretreatment Regulations.

§ 463.36 Pretreatment standards for new sources.

(a) PSNS for bis(2-ethylhexyl) phthalate, di-n-butyl phthalate, and dimethyl phthalate are reserved.

(b) Any new source subject to this subpart that introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403—General Pretreatment Regulations.

§ 463.37 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology. [Reserved]

PART 464—METAL MOLDING AND CASTING POINT SOURCE CATEGORY

GENERAL PROVISIONS

Subpart A—Aluminum Casting Subcategory

Subpart B—Copper Casting Subcategory