

Environmental Protection Agency

§ 413.84

Subpart H—Printed Circuit Board Subcategory

§ 413.80 Applicability: Description of the printed circuit board subcategory.

The provisions of this subpart apply to the manufacture of printed circuit boards, including all manufacturing operations required or used to convert an insulating substrate to a finished printed circuit board. The provisions set forth in other subparts of this category are not applicable to the manufacture of printed circuit boards.

§ 413.81 Specialized definitions.

For the purpose of this subpart:

(a) The term *sq ft* (“sq m”) shall mean the area of the printed circuit board immersed in an aqueous process bath.

(b) The term *operation* shall mean any step in the printed circuit board manufacturing process in which the board is immersed in an aqueous process bath which is followed by a rinse.

§§ 413.82–413.83 [Reserved]

§ 413.84 Pretreatment standards for existing sources.

Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR part 403 and achieve the following pretreatment standards for existing sources (PSES):

(a) No user introducing wastewater pollutants into a publicly owned treatment works under the provisions of this subpart shall augment the use of process wastewater or otherwise dilute the wastewater as a partial or total substitute for adequate treatment to achieve compliance with this standard.

(b) For a source discharging less than 38,000 liters (10,000 gal) per calendar day of electroplating process wastewater the following limitations shall apply:

SUBPART H—PRINTED CIRCUIT BOARD FACILITIES DISCHARGING LESS THAN 38,000 LITERS PER DAY PSES LIMITATIONS (MG/L)

Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 4 consecutive monitoring days shall not exceed
CN, A	5.0	2.7
Pb	0.6	0.4
Cd	1.2	0.7

(c) For plants discharging 38,000 liters (10,000 gal) or more per calendar day of electroplating process wastewater the following limitations shall apply:

SUBPART H—PRINTED CIRCUIT BOARD FACILITIES DISCHARGING 38,000 LITERS OR MORE PER DAY PSES LIMITATIONS (MG/L)

Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 4 consecutive monitoring days shall not exceed
CN, T	1.9	1.0
Cu	4.5	2.7
Ni	4.1	2.6
Cr	7.0	4.0
Zn	4.2	2.6
Pb	0.6	0.4
Cd	1.2	0.7
Total metals	10.5	6.8

(d) Alternatively, the following mass-based standards are equivalent to and may apply in place of those limitations specified under paragraph (c) of this section upon prior agreement between a source subject to these standards and the publicly owned treatment works receiving such regulated wastes:

SUBPART H—PRINTED CIRCUIT BOARD FACILITIES DISCHARGING 38,000 LITERS OR MORE PER DAY PSES LIMITATIONS (MG/SQ M-OPERATION)

Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 4 consecutive monitoring days shall not exceed
CN, T	169	89
Cu	401	241
Ni	365	229
Cr	623	357
Zn	374	232
Pb	53	36
Cd	107	65
Total metals	935	609

(e) For wastewater sources regulated under paragraph (c) of this section, the following optional control program may be elected by the source introducing treated process wastewater into a publicly owned treatment works with the concurrence of the control authority. These optional pollutant parameters are not eligible for allowance for removal achieved by the publicly owned treatment works under 40 CFR 403.7. In the absence of strong chelating agents, after reduction of hexavalent chromium wastes, and after neutralization using calcium oxide (or hydroxide) the following limitations shall apply:

SUBPART H—PRINTED CIRCUIT BOARD FACILITIES DISCHARGING 38,000 LITERS OR MORE PER DAY PSES LIMITATIONS (MG/L)

Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 4 consecutive monitoring days shall not exceed
CN, T	1.9	1.0
Pb	0.6	0.4
Cd	1.2	0.7
TSS	20.0	13.4
pH	(¹)	(¹)

¹ Within the range 7.5 to 10.0

(f) In addition to paragraphs (a) and (b) the following limitation shall apply for plants discharging less than 38,000 l (10,000 gal) per calendar day of electroplating process wastewater:

Pollutant or pollutant property	Maximum for any 1 day
	Milligrams per liter (mg/l)
TTO	4.57

(g) In addition to paragraphs (a), (c), (d), and (e) the following limitation shall apply for plants discharging 38,000 l (10,000 gal) or more per calendar day of electroplating process wastewater:

Pollutant or pollutant property	Maximum for any 1 day
	Milligrams per liter (mg/l)
TTO	2.13

(h) In addition to paragraphs (a), (b), (c), (d), (e), (f), and (g) of this section, the following shall apply: An existing source submitting a certification in lieu of monitoring pursuant to §413.03 of this regulation must implement the

toxic organic management plan approved by the control authority.

(Secs. 301, 304, 306, 307, 308, and 501 of the Clean Water Act (the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1251 *et. seq.*, as amended by the Clean Water Act of 1977, Pub. L. 95-217))

[46 FR 9467, Jan. 28, 1981, as amended at 48 FR 32485, July 15, 1983; 48 FR 43681, Sept. 26, 1983]

PART 414—ORGANIC CHEMICALS, PLASTICS, AND SYNTHETIC FIBERS

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- 414.31 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).
- 414.32 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT). [Reserved]
- 414.33 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available