paragraph (b) of this section. Once-through cooling water may be discharged with a total organic carbon concentration not to exceed 5 mg/l.

(e) *Effluent limitations for contaminated runoff.* The following effluent limitations constitute the quantity and quality of pollutants or pollutant properties controlled by this paragraph and attributable to contaminated runoff, which may be discharged after the application of the best practicable control technology currently available by a point source subject to this subpart.

(1) If wastewater consists solely of contaminated runoff and is not commingled or treated with process wastewater, it may be discharged if it does not exceed 15 mg/l oil and grease and 110 mg/l total organic carbon (TOC) based upon an analysis of any single grab or composite sample.

(2) If contaminated runoff is commingled or treated with process wastewater, or if wastewater consisting solely of contaminated runoff which exceeds 15 mg/l oil and grease or 110 mg/l TOC is not commingled or treated with any other type of wastewater, the quantity of pollutants discharged shall not exceed the quantity determined by multiplying the flow of contaminated runoff as determined by the permit writer times the concentrations listed in the following table:

Pollutant or pollutant property	BPT effluent limitations for contaminated runoff	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
	Metric units (kilograms per 1,000 m^3 of flow)	
BOD_5	48.	26.
TSS	33.	21.
COD [1]	360.	180.
Oil and grease	15.	8.
Phenolic compounds (4AAP)	0.35	0.17
Total chromium	0.73	0.43
Hexavalent chromium	0.062	0.028
pH	([2])	([2])
	English units (pounds per 1,000 gallons of flow)	
BOD_5	0.40	0.22
TSS	0.28	0.18
COD [1]	3.0	1.5
Oil and grease	0.13	0.067
Phenolic compounds (4AAP)	0.0029	0.0014
Total chromium	0.0060	0.0035
Hexavalent chromium	0.00052	0.00023

Pollutant or pollutant property	BPT effluent limitations for contaminated runoff	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
pH	([2])	([2])

[1] In any case in which the applicant can demonstrate that the chloride ion concentration in the effluent exceeds 1,000 mg/l (1,000 ppm), the permitting authority may substitute TOC as a parameter in lieu of COD. A TOC effluent limitation shall be based on effluent data from the particular refinery which correlates TOC to BOD_5. If in the judgment of the permitting authority, adequate correlation data are not available, the effluent limitations for TOC shall be established at a ratio of 2.2 to 1 to the applicable effluent limitations for BOD_5.

[2] Within the range of 6.0 to 9.0.

[47 FR 46446, Oct. 18, 1982, as amended at 50 FR 28522, 28523, July 12, 1985; 50 FR 32414, Aug. 12, 1985]

§ 419.23 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).

(a) Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

Pollutant or pollutant property	BAT Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
	Metric units (kilograms per 1,000 m^3 of feedstock)	
COD [1]	210	109
Ammonia as N	18.8	8.5
Sulfide	0.18	0.082
	English units (pounds per 1,000 bbl of feedstock)	
COD [1]	74.0	38.4
Ammonia as N	6.6	3.0
Sulfide	0.065	0.029

[1] See footnote following table in § 419.13(d).

(b) The limits set forth in paragraph (a) of this section are to be multiplied by the following factors to calculate the maximum for any one day and

maximum average of daily values for thirty consecutive days.

(1) Size factor.

1,000 bbl of feedstock per stream day	Size factor
Less than 24.9	0.91
25.0 to 49.9	0.95
50.0 to 74.9	1.04
75.0 to 99.9	1.13
100.0 to 124.9	1.23
125.0 to 149.9	1.35
150.0 or greater	1.41

(2) Process factor.

Process configuration	Process factor
Less than 2.49	0.58
2.5 to 3.49	0.63
3.5 to 4.49	0.74
4.5 to 5.49	0.88
5.5 to 5.99	1.00
6.0 to 6.49	1.09
6.5 to 6.99	1.19
7.0 to 7.49	1.29
7.5 to 7.99	1.41
8.0 to 8.49	1.53
8.5 to 8.99	1.67
9.0 to 9.49	1.82
9.5 or greater	1.89

(3) See the comprehensive example in subpart D, § 419.42(b)(3).

(c)(1) In addition to the provisions contained above pertaining to COD, ammonia and sulfide, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT):

(i) For each of the regulated pollutant parameters listed below, the effluent limitation for a given refinery is the sum of the products of each effluent limitation factor times the applicable process feedstock rate, calculated as provided in 40 CFR 122.45(b). Applicable production processes are presented in appendix A, by process type. The process identification numbers presented in this appendix A are for the convenience of the reader. They can be cross-referenced in the *Development Document for Effluent Limitations Guidelines, New Source Performance Standards, and Pretreatment Standards for the Petroleum Refining Point Source Category* (EPA 440/1–82/014), Table III–7, pp. 49–54.

Pollutant or pollutant property and process type	BAT effluent limitation factor	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
	Metric units (kilograms per 1,000 cubic meters of feedstock)	
Phenolic compounds (4AAP):		
Crude	0.037	0.009
Cracking and coking	0.419	0.102
Asphalt	0.226	0.055
Lube	1.055	0.257
Reforming and alkylation	0.377	0.092
Total chromium:		
Crude	0.030	0.011
Cracking and coking	0.340	0.118
Asphalt	0.183	0.064
Lube	0.855	0.297
Reforming and alkylation	0.305	0.106
Hexavalent chromium:		
Crude	0.0019	0.0009
Cracking and coking	0.0218	0.0098
Asphalt	0.0117	0.0053
Lube	0.0549	0.0248
Reforming and alkylation	0.0196	0.0088
	English units (pounds per 1,000 bbl of feedstock)	
Phenolic compounds (4AAP):		
Crude	0.013	0.003
Cracking and coking	0.147	0.036
Asphalt	0.079	0.019
Lube	0.369	0.090
Reforming and alkylation	0.132	0.032
Total chromium:		
Crude	0.011	0.004
Cracking and coking	0.119	0.041
Asphalt	0.064	0.022
Lube	0.299	0.104
Reforming and alkylation	0.107	0.037
Hexavalent chromium:		
Crude	0.0007	0.0003
Cracking and coking	0.0076	0.0034
Asphalt	0.0041	0.0019
Lube	0.0192	0.0087
Reforming and alkylation	0.0069	0.0031

(2) See the comprehensive example in subpart D, § 419.43(c)(2).

(d) The provisions of § 419.13(d) apply to discharges of process wastewater pollutants attributable to ballast water by a point source subject to the provisions of this subpart.

(e) The quantity and quality of pollutants or pollutant properties controlled by this paragraph, attributable to once-through cooling water, are excluded from the discharge allowed by paragraph (b) of this section. Once-through cooling water may be discharged with a total organic carbon concentration not to exceed 5 mg/l.

(f) *Effluent limitations for contaminated runoff.* The following effluent limitations constitute the quantity and quality of pollutants or pollutant properties controlled by this paragraph and attributable to contaminated runoff, which may be discharged after the application of the best available technology economically achievable by a point source subject to this subpart.

(1) If wastewater consists solely of contaminated runoff and is not commingled or treated with process wastewater, it may be discharged if it does not exceed 110 mg/l total organic carbon (TOC) based upon an analysis of any single grab or composite sample.

(2) If contaminated runoff is commingled or treated with process wastewater, or if wastewater consisting solely of contaminated runoff which exceeds 110 mg/l TOC is not commingled or treated with any other type of wastewater, the quantity of pollutants discharged shall not exceed the quantity determined by multiplying the flow of contaminated runoff as determined by the permit writer times the concentrations listed in the following table:

Pollutant or pollutant property	BAT effluent limitations for contaminated runoff	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
	Metric units (kilograms per 1,000 m^3 of flow)	
Phenolic compounds (4AAP)	0.35	0.17
Total chromium	0.60	0.21
Hexavalent chromium	0.062	0.028
COD [1]	360.	180.
	English units (pounds per 1,000 gallons of flow)	
Phenolic compounds (4AAP)	0.0029	0.0014
Total chromium	0.0050	0.0018
Hexavalent chromium	0.00052	0.00023
COD [1]	3.0	1.5

[1] In any case in which the applicant can demonstrate that the chloride ion concentration in the effluent exceeds 1,000 mg/l (1,000 ppm), the permitting authority may substitute TOC as a parameter in lieu of COD. A TOC effluent limitation shall be based on effluent data from the particular refinery which correlates TOC to BOD_5. If in the judgement of the permitting authority, adequate correlation data are not available, the effluent limitations for TOC shall be established at a ratio of 2.2 to 1 to the applicable effluent limitations for BOD_5

[47 FR 46446, Oct. 18, 1982, as amended at 50 FR 28523, July 12, 1985; 50 FR 32414, Aug. 12, 1985]

§ 419.24 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

(a) Any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT):

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
	Metric units (kilograms per 1,000 (m^3 of feedstock)	
BOD_5	28.2	15.6
TSS	19.5	12.6
Oil and grease	8.4	4.5
pH	(1)	(1)
	English units (pounds per 1,000 bbl of feedstock)	
BOD_5	9.9	5.5
TSS	6.9	4.4
Oil and grease	3.0	1.6
pH	(1)	(1)

[1] Within the range of 6.0 to 9.0.

(b) The limits set forth in paragraph (a) of this section are to be multiplied by the following factors to calculate the maximum for any one day and maximum average of daily values for thirty consecutive days.

(1) Size factor.

1,000 bbl of feedstock per stream day	Size factor
Less than 24.9	0.91
25.0 to 49.9	0.95
50.0 to 74.9	1.04
75.0 to 99.9	1.13
100.0 to 124.9	1.23
125.0 to 149.9	1.35
150.0 or greater	1.41

(2) Process factor.

Process configuration	Process factor
Less than 2.49	0.58
2.5 to 3.49	0.63
3.5 to 4.49	0.74
4.5 to 5.49	0.88
5.5 to 5.99	1.00
6.0 to 6.49	1.09
6.5 to 6.99	1.19
7.0 to 7.49	1.29
7.5 to 7.99	1.41
8.0 to 8.49	1.53