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BAT EFFLUENT LIMITATIONS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	kg/1,000 kkg (pounds per m lion pounds) of sand re claimed	
Copper (T) Lead (T) Zinc (T) Total Phenols	0.217 0.396 0.732 0.642	0.12 0.194 0.276 0.224

	Maximum for any 1 day	Maximum for monthly average	Annual average 1
Copper (T) Lead (T) Zinc (T) Total Phenols	(mg/l) ² 0.29 0.53 0.98 0.86	(mg/l) ² 0.16 0.26 0.37 0.3	0.0485 0.112 0.194 0.149

¹ kg/1000 kkg (pounds per million pounds) of sand re-

(2) Applicable to plants that are casting primarily steel and to plants that are casting primarily malleable iron where equal to or less than 3,557 tons of metal are poured per year.

BAT EFFLUENT LIMITATIONS

Pollutant or pollutant property	Maximum for any 1 day Maximum monthly a age	
	kg/1,000 kkg (pounds per mil lion pounds) of sand re claimed	
Copper (T)	0.217 0.59 1.1 0.642	0.12 0.291 0.418 0.224

PSNS

	Maximum	Maximum	Annual
	for any 1	for monthly	aver-
	day	average	age 1
Copper (T)	(mg/l) ² 0.29 0.79 1.47 0.86	(mg/l) ² 0.16 0.39 0.56 0.3	0.0485 0.164 0.299 0.149

[50 FR 45247, Oct. 30, 1985; 51 FR 21761, June 16, 1986]

§464.34 New source performance standards.

Any new source subject to this subpart must achieve the following new source performance standards (NSPS), except that non-continuous dischargers shall not be subject to the maximum day and maximum for monthly average mass (kg/1,000 kkg or lb/million lb of metal poured; kg/1,000 kkg or lb/million lb of sand reclaimed; kg/62.3 million Sm³ or lb/billion SCF of air scrubbed) effluent standards for copper, lead, zinc, total phenols, oil and grease, and TSS. For non-continuous dischargers, annual average mass standards and maximum day and maximum for monthly average concentration (mg/l) standards shall apply. Concentration standards and annual average mass standards shall only apply to non-continuous dischargers.

(a) Casting Cleaning Operations. (1) Applicable to plants that are casting primarily ductile or gray iron and to plants that are casting primarily malleable iron where greater than 3,557 tons of metal are poured per year.

NSPS

Pollutant or pollutant property	r pollutant property Maximum for any 1 day Maximum for ange		
	kg/1,000 kkg (pounds per lion pounds) of m poured		
Copper (T)	0.0129 0.0237 0.0437 1.34 0.67	0.0071 0.0116 0.0165 0.446 0.536	

¹ Within the range of 7.0 to 10.0 at all times.

	Maximum for any 1 day	Maximum for monthly average	Annual aver- age 1
	(mg/l) ²	(mg/l) ²	
Copper (T)	0.29	0.16	0.0029
Lead (T)	0.53	0.26	0.0067
Zinc (T)	0.98	0.37	0.0116
Oil and grease	30	10	0.223
TTS	15	12	0.116
pH	(³)	(³)	(3)

¹ kg/1000 kkg (pounds per million pounds) of metal poured. ² These concentrations must be multiplied by the ratio of (5.33/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a spe-cific plant. ³ Within the range of 7.0 to 10.0 at all times.

(2) Applicable to plants that are casting primarily steel and to plants that

¹kg/1000 kkg (pounds per million pounds) of sand re-claimed.
²These concentrations must be multiplied by the ratio of (89.5/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of sand reclaimed) for a specific plant.

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are casting primarily malleable iron where equal to or less than 3,557 tons of metal are poured per year.

NSPS

Pollutant or pollutant property	Maximum for any 1 day Maximum monthly a age		
	kg/1,000 kkg (pounds per mi lion pounds) of meta poured		
Copper (T)	0.0129	0.0071	
Lead (T)	0.0353	0.0174	
Zinc (T)	0.0656	0.025	
Oil and grease	1.34 0.4		
TSS	1.7 0.67		
pH	(1) (1)		

¹ Within the range of 7.0 to 10.0 at all times.

	Maximum for any 1 day	Maximum for monthly average	Annual aver- age ¹
	(mg/l) ²	(mg/l) ²	
Copper (T)	0.29	0.16	0.0029
Lead (T)	0.79	0.39	0.0098
Zinc (T)	1.47	0.56	0.0179
Oil and grease	30	10	0.223
TTS	38	15	0.446
pH	(3)	(3)	(3)

¹ kg/1,000 kkg (pounds per million pounds) of metal poured.
²These concentrations must be multiplied by the ratio of (5.35/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.

(b) Casting Quench Operations. (1) Applicable to plants that are casting primarily ductile or gray iron and to plants that are casting primarily malleable iron where greater than 3,557 tons of metal are poured per year.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average	
	kg/1,000 kkg (pounds per n lion pounds) of me poured		
Copper (T)	0.0138	0.0076	
Lead (T)	0.0252	0.0124	
Zinc (T)	0.0466 0		
Oil and grease	1.43	0.476	
TSS	0.713	0.571	
pH	(1) (1)		

¹ Within the range of 7.0 to 10.0 at all times.

	Maximum for any 1 day	Maximum for monthly average	Annual aver- age ¹
	(mg/l) ²	(mg/l) ²	
Copper (T)	0.29	0.16	0.0031
Lead (T)	0.53	0.26	0.0071
Zinc (T)	0.98	0.37	0.0124
Oil and grease	30	10	0.238
TSS	15	12	0.124
pH	(3)	(3)	(3)

¹ Kg/1000 kkg (pounds per million pounds) of metal poured.

(2) Applicable to plants that are casting primarily steel and to plants that are casting primarily malleable iron where equal to or less than 3,557 tons of metal are poured per year.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average	
	kg/1,000 kkg (pounds per r lion pounds) of me poured		
Copper (T)	0.0138	0.0076	
Lead (T)	0.0376	0.0185	
Zinc (T)			
Oil and grease			
TSS	1.81	0.713	
pH	(1)		

¹ Within the range of 7.0 to 10.0 at all times.

	Maximum for any 1 day	Maximum for monthly average	Annual aver- age ¹
	(mg/l) ²	(mg/l) ²	
Copper (T)	0.29	0.16	0.0031
Lead (T)	0.79	0.39	0.0105
Zinc (T)	1.47	0.56	0.019
Oil and grease	30	10	0.238
TSS	38	15	0.476
pH	(³)	(³)	(3)

¹ Kg/1000 kkg (pounds per million pounds) of metal poured.
² These concentrations must be multiplied by the ratio of (5.7/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.

(c) Dust Collection Scrubber Operations.
(1) Applicable to plants that are casting primarily ductible or gray iron and to plants that are casting primarily malleable iron where greater than 3,557 tons of metal are poured per year.

³Within the range of 7.0 to 10.0 at all times.

²Within the range of 7.0 to 10.0 at all times.

³These concentrations must be multiplied by the ratio of (5.7/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.

³ Within the range of 7.0 to 10.0 at all times.

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NSPS

	I		
Pollutant or pollutant property	Maximum for any 1 day Maximum monthly a age		
	kg/62.3 million Sm³ (pounds pounds pounds pounds) of air scrubbed		
Copper (T)	0.218	0.12	
Lead (T)	0.398	0.195	
Zinc (T)	0.736	0.278	
Total Phenols	0.646	0.225	
Oil and grease	22.5	7.51	
TSS	11.3	9.01	
pH	(1)	(1)	

¹ Within the range of 7.0 to 10.0 at all times.

	Maximum for any 1 day	Maximum for monthly average	Annual aver- age 1
	(mg/l) ²	(mg/l) ²	
Copper (T)	0.29	0.16	0.0488
Lead (T)	0.53	0.26	0.113
Zinc (T)	0.98	0.37	0.195
Total phenols	0.86	0.3	0.15
Oil and grease	30	10	3.76
TSS	15	12	1.95
pH	(3)	(3)	(3)

 $^{^{1}\}mbox{kg/62.3}$ millions \mbox{Sm}^{3} (pound per billion SCF) of air scrubbed.

(2) Applicable to plants that are casting primarily steel and to plants that are casting primarily malleable iron where equal to or less than 3,557 tons of metal are poured per year.

NSPS

Pollutant or pollutant property	Maximum for any 1 day Maximum monthly a age		
	kg/62.3 million Sm³ (pounds p billion SCF) of air scrubbed		
Copper (T)	0.218	0.12	
Lead (T)	0.593	0.293	
Zinc (T)	1.1	0.421	
Total phenols	0.656	0.225	
Oil and grease	22.5	7.51	
TSS	28.5	11.3	
pH	(¹)	(¹)	

¹ Within the range of 7.0 to 10.0 at all times.

	Maximum for any 1 day	Maximum for monthly average	Annual aver- age ¹
	(mg/l) ²	(mg/l) ²	
Copper (T)	0.29	0.16	0.0488
Lead (T)	0.79	0.39	0.165
Zinc (T)	1.47	0.56	0.3
Total phenols	0.86	0.3	0.15
Oil and grease	30	10	3.76
TSS	38	15	7.51
pH	(3)	(3)	(3)

¹ kg/62.3 millions Sm3 (pound per billion SCF) of air scrubbed.

2 Within the range of 7.0 to 10.0 at all times.

- (d) Grinding Scrubber Operations. No discharge of process wastewater pollutants to navigable waters.
- (e) Investment Casting. (1) Applicable to plants that are casting primarily ductile or gray iron and to plants that are casting primarily malleable iron where greater than 3,557 tons of metal are poured per year.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average	
	kg/1,000 kkg (pounds per million pounds) of metal poure		
Copper (T) Lead (T)	3.19 5.84	1.76 2.86	
Zinc (T)			
Oil and grease	330	110	
TSS	165	132	
pH	(1)	(1)	

¹ Within the range of 7.0 to 10.0 at all times.

	Maximum for any 1 day	Maximum for monthly average	Annual average ¹
	(mg/l) ²	(mg/l) ²	
Copper (T)	0.29	0.16	0.716
Lead (T)	0.53	0.26	1.65
Zinc (T)	0.98	0.37	2.86
Oil and grease	30	10	55.1
TSS	15	12	28.6
pH	(3)	(3)	(3)

¹ kg/1,000 kkg (pounds per million pounds) of metal poured.
² These concentrations must be multiplied by the ratio of (1,320/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.
³ Within the range of 7.0 to 10.0 at all times.

(2) Applicable to plants that are casting primarily steel and to plants that are casting primarily malleable iron where equal to or less than 3,557 tons of metal are poured per year.

²Within the range of 7.0 to 10.0 at all times

Within the range of 7.0 to 10.0 at all times.
3 These concentrations must be multiplied by the ratio of (0.09/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 SCF of air scrubbed) for a specific plant.

³These concentrations must be multiplied by the ratio of (0.09/) where is the actual normalized process wastewater flow (in gallons per 1,000 SCF of air scrubbed) for a specific

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Pollutant or pollutant property	Maximum for any 1 day Maximum for monthly ave age		
	kg/1,000 kkg (pounds per million pounds) of metal poured		
Copper (T)	3.19 1.76		
Lead (T)	8.7 4.3		
Zinc (T)	16.2 6.17		
Oil and grease	330 110		
TSS	419	165	
pH	(1)	(1)	

¹ Within the range of 7.0 to 10.0 at all times.

	Maximum for any 1 day	Maximum for monthly average	Annual average 1
Copper (T)	(mg/l) ² 0.29 0.79 1.47 30 38 (³)	(mg/l) ² 0.16 0.39 0.56 10 15 (³)	0.716 2.42 4.41 55.1 110

¹ kg/1,000 kkg (pounds per million pounds) of metal poured. ² These concentrations must be multiplied by the ratio of (1,320/x) where x is the actual normalized process waste-water flow (in gallons per 1,000 pounds of metal poured) for a specific plant

specific plant.

³Within the range of 7.0 to 10.0 at all times.

(f) Melting Furnace Scrubber Operations. (1) Applicable to plants that are casting primarily ductile or gray iron and to plants that are casting primarily malleable iron where greater than 3,557 tons of metal are poured per year.

NSPS

Pollutant or pollutant property	Maximum for any 1 day Maximum monthly a age		
	kg/62.3 million Sm ³ (pound per billion SCF) of air scrubb		
Copper (T) Lead (T) Zinc (T) Total phenols Oil and grease TSS pH	1.02 1.86 3.44 3.01 105 52.6 (¹)	0.561 0.911 1.30 1.05 35 42.1 (¹)	

¹ Within the range of 7.0 to 10.0 at all times.

	Maximum for any 1 day	Maximum for monthly average	Annual average
	(mg/l) ²	(mg/l) ²	
Copper (T)	0.29	0.16	0.228
Lead (T)	0.53	0.26	0.526
Zinc (T)	0.98	0.37	0.911
Total phenols	0.86	0.3	0.701
Oil and grease	30	10	17.5
TSS	15	12	9.11
pH	(³)	(³)	(3)

 $^{1}\mbox{kg/}62.3$ million $\mbox{Sm}^{\,3}$ (pounds per billion SCF) of air scrubbed.

²These concentrations must be multiplied by the ratio of (0.42/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 SCF of air scrubbed) for a specific plant.

³ Within the range of 7.0 to 10.0 at all times.

(2) Applicable to plants that are casting primarily steel and to plants that are casting primarily malleable iron where equal to or less than 3,557 tons of metal are poured per year.

NSPS

Pollutant or pollutant property	Maximum for any 1 day Maximum for monthly ave age		
	kg/62.3 million Sm³ (pounds per billion SCF) of air scrubbe		
Copper (T)	1.02 2.77 5.15 3.01 105 133 (1)	0.561 1.37 1.96 1.05 35 52.6 (1)	

1 Within the range of 7.0 to 10.0 at all times.

Maximum for any 1 day	Maximum for monthly average	Annual average
(mg/l) ²	(mg/l) ²	
0.29	0.16	0.228
0.79	0.39	0.771
1.47	0.56	1.4
0.38	0.3	0.701
30	10	17.5
38	15	35
(3)	(3)	(3)
	for any 1 day (mg/l) 2 0.29 0.79 1.47 0.38 30 38	for any 1 for monthly average (mg/l) ² (mg/l) ² 0.29 0.16 0.79 0.39 1.47 0.56 0.38 0.3 30 10 38 15

¹kg/62.3 million Sm³ (pounds per billion SCF) of air scrubbed.
²These concentrations must be multiplied by the ratio of

(0.42/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 SCF of air scrubbed) for a specific

plant.

³ Within the range of 7.0 to 10.0 at all times.

(g) Mold Cooling Operations. (1) Applicable to plants that are casting primarily ductile or gray iron and to plants that are casting primarily malleable iron where greater than 3,557 tons of metal are poured per year.

NSPS

Pollutant or pollutant property	lutant or pollutant property Maximum for any 1 day	
Copper (T)	0.0428	0.0236
Lead (T)	0.0783	0.0384
Zinc (T)	0.0145	0.0546
Oil and grease	4.43	1.48
TSS	2.22	1.77
pH	(1)	(1)

¹ Within the range of 7.0 to 10.0 at all times.

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	Maximum for any 1 day	Maximum for monthly average	Annual aver- age ¹
	(mg/l) ²	(mg/l) ¹	
Copper (T)	0.29	0.16	0.0096
Lead (T)	0.53	0.26	0.0222
Zinc (T)	0.98	0.37	0.0384
Oil and grease	30	10	0.738
TSS	15	12	0.384
pH	(3)	(3)	(3)

¹kg/1,000 kkg (pounds per million) pounds of metal poured.
²These concentrations must be multiplied by the ratio of (17.7/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.

³Within the range of 7.0 to 10.0 at all times.

(2) Applicable to plants that are casting primarily steel and to plants that are casting primarily malleable iron where equal to or less than 3,557 tons of metal are poured per year.

NSPS

Pollutant or pollutant property	Maximum for any 1 day Maximum monthly av	
	kg/1,000 kkg (pounds per m lion pounds) of met poured	
Copper (T)	0.0428	0.0236
Lead (T)	0.117	0.0576
Zinc (T)	0.217	0.0827
Oil and grease	4.43	1.48
TSS	5.61	2.22
pH	(1)	

¹ Within the range of 7.0 to 10.0 at all times.

	Maximum for any 1 day	Maxium for monthly average	Annual aver- age ¹
	(mg/1) ²	(mg/l) ²	
Copper (T)	0.29	0.16	0.0096
Lead (T)	0.79	0.39	0.0325
Zinc (T)	1.47	0.56	0.0591
Oil and grease	30	10	0.738
TSS	38	15	1.48
pH	(3)	(3)	(3)

¹kg/1,000 kkg (pounds per million) pounds of metal poured.
²These concentrations must be multiplied by the ratio of (17.7/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.

³Within the range of 7.0 to 10.0 at all times.

(h) Slag Quench Operations. (1) Applicable to plants that are casting primarily ductile or gray iron and to plants that are casting primarily malleable iron where greater than 3,557 tons of metal are poured per year.

NSPS

Pollutant or pollutant property	Ilutant or pollutant property Maximum for any 1 day Maximum for any 1 day	
	kg/1,000 kkg (pounds per lion pounds) of m poured	
Copper (T)	0.0527 0.0964 0.178 5.46 2.73	0.0291 0.0473 0.0673 1.82 2.18

¹ Within the range of 7.0 to 10.0 at all times.

	Maximum for any 1 day	Maximum for monthly average	Annual aver- age 1
	(mg/l) ²	(mg/l) ²	
Copper (T)	0.29	0.16	0.0118
Lead (T)	0.53	0.26	0.0273
Zinc (T)	0.98	0.37	0.0473
Oil and grease	30	10	0.909
TSS	15	12	0.473
pH	(3)	(3)	(3)

1 kg/1,000 kkg (pounds per million pounds) of metal poured.
2 These concentrations must be multiplied by the ratio of (21.8/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.
3 Within the range of 7.0 to 10.0 at all times.

(2) Applicable to plants that are casting primarily steel and to plants that are casting primarily malleable iron where equal to or less than 3,557 tons of metal are poured per year.

NSPS

Pollutant or pollutant property	ollutant or pollutant property Maximum for any 1 day kg/1,000 kkg (pounds pellion pounds) of poured	
Copper (T) Lead (T) Zinc (T)	0.0527 0.144 0.267	0.0291 0.0709 0.102
Oil and grease	5.46 6.91	1.82 2.73

¹ Within the range of 7.0 to 10.0 at all times.

	Maximum for any 1 day	Maximum for monthly average	Annual average
Copper (T) Lead (T) Zinc (T)	(mg/l) ² 0.29 0.79 1.47	(mg/1) ² 0.16 0.39 0.56	0.0118 0.04 0.0728
Oil and grease	30	10	0.909
TSS	38 (3)	15 (3)	1.82
pH	(°)	(3)	(3)

1 kg/1000 kkg (pounds per million pounds) of metal poured.
2 These concentrations must be multiplied by the ratio of (21.8/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.

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³ Within the range of 7.0 to 10.0 at all times.

(i) Wet Sand Reclamation Operations. (1) Applicable to plants that are casting primarily ductile or gray iron and to plants that are casting primarily malleable iron where greater than 3,557 tons of metal are poured per year.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	kg/1,000 kkg (p lion pounds) claimed	oounds per mil- of sand re-
Copper (T) Lead (T) Zinc (T) Total phenols Oil and grease TSS pH	0.217 0.396 0.732 0.642 22.4 11.2	0.12 0.194 0.276 0.224 7.47 8.96

¹ Within the range of 7.0 to 10.0 at all times.

	Maximum for any 1 day	Maximum for monthly average	Annual aver- age ¹
	(mg/l) ²	(mg/l) ²	
Copper (T)	0.29	0.16	0.0485
Lead (T)	0.53	0.26	0.112
Zinc (T)	0.98	0.37	0.194
Total phenols	0.86	0.3	0.149
Oil and grease	30	10	3.73
TSS	15	12	1.94
pH	(3)	(3)	(3)

¹ kg/1,000 kkg (pounds per million pounds) of sand re-

(2) Applicable to plants that are casting primarily steel and to plants that are casting primarily malleable iron where equal to or less than 3,557 tons of metal are poured per year.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	kg/1,000 kkg (pounds per lion pounds) of sand claimed	
Copper (T)	0.217	0.12
	1	
Lead (T)	0.59	0.291
Zinc (T)	1.1	0.418
Total phenols	0.642	0.224
Oil and grease	22.4	7.47
TSS	28.4	11.2
pH	(¹)	(¹)

¹ Within the range of 7.0 to at all times.

	Maximum for any 1 day	Maximum for monthly average	Annual aver- age 1
	(mg/l) ²	(mg/l) ²	
Copper (T)	0.29	0.16	0.0485
Lead (T)	0.79	0.39	0.164
Zinc (T)	1.47	0.56	0.299
Total phenols	0.86	0.3	0.149
Oil and grease	30	10	3.73
TSS	38	15	7.47
pH	(3)	(3)	(3)

¹ kg/1,000 kkg (pounds per million pounds) of sand re-claimed.

[50 FR 45247, Oct. 30, 1985; 51 FR 21761, June 16, 19861

§464.35 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.

(a) Casting Cleaning Operations. (1) Applicable to plants that are casting primarily ductile iron, to plants that are casting primarily malleable iron where greater than 3,557 tons of metal are poured per year, and to plants that are casting primarily gray iron where greater than 1,784 tons of metal are poured per year.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	kg/1,000 kkg (pounds per mil- lion pounds) of metal poured	
Copper (T) Lead (T)	0.0129 0.0237	0.0071 0.0116
Zinc (T)	0.0437	0.0165

(2) Applicable to plants that are casting primarily steel, to plants that are casting primarily malleable iron where equal to or less than 3,557 tons of metal are poured per year, and to plants that are casting primarily gray iron where equal to or less than 1,784 tons of metal are poured per year.

claimed.

2 These concentrations must be multiplied by the ratio of 2 These concentrations must be maintained by an included (89.5/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of sand reclaimed) for a specific plant.

3 Within the range of 7.0 to 10.0 at all times.

²These concentrations must be multiplied by the ratio of (89.5/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of sand reclaimed) for a specific plant.

³Within the range of 7.0 to 10.0 at all times.