

Subsection AC - Sector AC-Electronic and Electrical Equipment and Components, Photographic and Optical Goods.

AC.1 Covered Stormwater Discharges.

The requirements in Subsection AC apply to stormwater discharges associated with industrial activity from facilities that manufacture electronic and electrical equipment and components, photographic and optical goods as identified by the SIC Codes specified in Table D-1 of Appendix D of the permit.

AC.2 Industrial Activities Covered by Sector AC.

Permittees under Sector AC are primarily engaged in the manufacturing of the following types of products:

AC.2.1 measuring, analyzing, and controlling instruments;

AC.2.2 photographic, medical, and optical goods;

AC.2.3 watches and clocks;

AC.2.4 computer and office equipment; and

AC.2.5 electrical and electronic equipment and components.

AC.3 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

No additional sector-specific requirements apply.

AC.4 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table AC-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration¹	Effluent Limit Guidelines
Electronic, Electrical, Photographic, and Optical Goods (SIC 3571-3579, 3812-3873)	Total Suspended Solids (TSS)	100 mg/L	--
Electronic and Electrical Equipment and Components, except Computers (SIC 3612-3699)	Total Suspended Solids (TSS)	100 mg/L	--
	Total Recoverable Copper ²	0.014 mg/L	--

Table AC-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration¹	Effluent Limit Guidelines
	Total Recoverable Lead ³	0.082 mg/L	--

¹You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

² The benchmark value of copper is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table AC-1 (i.e. 0.014 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for copper:

$$\text{Benchmark} = (e^{[(0.9422)(\ln \text{hardness}) - 1.700]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned} \text{Benchmark} &= (e^{[(0.9422)(\ln 175) - 1.700]})/1000 \\ &= (e^{3.166})/1000 \\ &= 23.72/1000 \\ &= 0.024 \text{ mg/L} \end{aligned}$$

The following are example benchmark values for copper:

<u>Hardness (mg/L)</u>	<u>Benchmark value (mg/L)</u>
100	0.014
125	0.017
150	0.021
175	0.024
200	0.027
225	0.030
250	0.033

³ The benchmark value of lead is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table AC-1 (i.e. 0.082 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for lead:

$$\text{Benchmark} = (e^{[(1.273)(\ln \text{hardness}) - 1.460]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\text{Benchmark} = (e^{[(1.273)(\ln 175) - 1.460]})/1000$$

$$\begin{aligned} &= (e^{5.1148})/1000 \\ &= 166.46/1000 \\ &= 0.17 \text{ mg/L} \end{aligned}$$

The following are example benchmark value for lead:

<u>Hardness (mg/L)</u>	<u>Benchmark value (mg/L)</u>
100	0.082
125	0.11
150	0.14
175	0.17
200	0.20
225	0.23
250	0.26