Subsection Y - Sector Y-Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries.

Y.1 Covered Stormwater Discharges.

The requirements in Subsection Y apply to stormwater discharges associated with industrial activity from rubber, miscellaneous plastic products, and miscellaneous manufacturing industries facilities as identified by the SIC Codes specified under Sector Y in Table D-1 of Appendix D of the permit.

Y.2 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

Y.2.1 Potential Pollutant Sources for Rubber Manufacturers. (See also Part 2.1.4) Review the use of zinc at your facility and the possible pathways through which zinc may be discharged in stormwater runoff.

Y.2.2 Controls for Rubber Manufacturers. (See also Part 2.1.5) Describe and implement specific controls to minimize the discharge of zinc in your stormwater discharges. Parts Y.2.2.1 to Y.2.2.5 give possible sources of zinc to be reviewed and list some specific BMPs to be considered for implementation (or their equivalents). Following are some general BMP options to consider: using chemicals purchased in pre-weighed, sealed polyethylene bags; storing in-use materials in sealable containers, ensuring an airspace between the container and the cover to minimize "puffing" losses when the container is opened, and using automatic dispensing and weighing equipment.

Y.2.2.1 Inadequate Housekeeping. Review the handling and storage of zinc bags at your facility. Following are some BMP options: employee training on the handling and storage of zinc bags, indoor storage of zinc bags, cleanup of zinc spills without washing the zinc into the storm drain, and the use of 2,500-pound sacks of zinc rather than 50- to 100-pound sacks.

Y.2.2.2 Dumpsters. Reduce discharges of zinc from dumpsters. Following are some BMP options: covering the dumpster, moving the dumpster indoors, or providing a lining for the dumpster.

Y.2.2.3 Malfunctioning Dust Collectors or Baghouses. Review dust collectors or baghouses as possible sources in zinc in stormwater runoff. Replace or repair, as appropriate, improperly operating dust collectors or baghouses.

Y.2.2.4 Grinding Operations. Review dust generation from rubber grinding operations and, as appropriate, install a dust collection system.

Y.2.2.5 Zinc Stearate Coating Operations. Detail appropriate measures to prevent or

clean up drips and spills of zinc stearate slurry that may be released to the storm drain. One BMP option is to use alternative compounds to zinc stearate.

Y.2.3 Controls for Plastic Products Manufacturers. Describe and implement specific controls to minimize the discharge of plastic resin pellets in your stormwater discharges. BMPs to be considered for implementation (or their equivalents) include minimizing spills, cleaning up of spills promptly and thoroughly, sweeping thoroughly, pellet capturing, employee education, and disposal precautions.

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

Table Y-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 Concentration[1]	Effluent Limit Guidelines
Tires and Inner Tubes; Rubber Footwear; Gaskets, Packing and Sealing Devices; and Rubber Hose and Belting; and Fabricated Rubber Products, Not Elsewhere Classified (SIC 3011-3069, rubber manufacturing only)	Total Recoverable Zinc[2]	0.12 mg/L	--
	Total Recoverable Lead[3]	0.082 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	–
Miscellaneous Plastics Products (SIC 3081-3089); Musical Instruments (SIC 3931); Dolls, Toys, Games and Sporting and Athletic Goods (SIC 3942-3949); Pens, Pencils, and other Artists' Materials (SIC 3951-3955, except 3952 as Specified in Sector C); Costume Jewelry, Costume Novelties, Buttons, and Miscellaneous Notions, Except Precious Metal (SIC 3961, 3965); and Miscellaneous Manufacturing Industries (SIC 3991-3999)	Total Suspended Solids (TSS)	100 mg/L	--

[1]You 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 zinc is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table Y-1 (i.e. 0.12 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 zinc:

$$\text{Benchmark} = (e^{[(0.8473)(\ln \textit{hardness}) + 0.884]})/1000$$

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

$$\text{Benchmark} = (e^{[(0.8473)(\ln 175) + 0.884]})/1000$$

$= (e^{5.26})/1000$
$= 192.51/1000$
$= 0.19$ mg/L

The following are example benchmark values for zinc:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.12
125	0.14
150	0.17
175	0.19
200	0.22
225	0.24
250	0.26

[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 Y-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:

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

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

$\text{Benchmark} = (e^{[(1.273)(\ln 175) - 1.460]})/1000$
$= (e^{5.1148})/1000$
$= 166.46/1000$
$= 0.17$ mg/L

The following are example benchmark value for lead:

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