

Environmental Standards

Effluent

PHARMACEUTICALS INDUSTRY (Bulk Drugs)

	Parameter	Concentration not to exceed limits in mg/l (except pH)
Compulsory		
	pH	6.5 - 8.5
	Oil & grease	10
	BOD (3 days at 27°C)	100
	Total Suspended solids	100
	Bioassay test	90% survival after 96 hours in 10% effluent. (Test should be carried out as per IS:9582-1971.)
Additional		
	Mercury	0.01
	Arsenic	0.2
	Chromium (Hexavalent)	0.1
	Lead	0.1
	Cyanide	0.1
	Phenolics (C ₆ H ₅ OH)	1.0
	Sulfides (as S)	2.0
	Phosphate (as P)	5.0

Note

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1. The limit of BOD at 27°C for 3 days will be 30 mg/l if effluent is discharged directly to a fresh water body.
2. The additional parameters are applicable to bulk drug manufacturing units depending upon the process and product.
3. No limit for COD is prescribed, but it should be monitored. If the COD of the treated effluent is greater than 250 mg/l, such industrial units are required to identify chemicals causing the same. In case these are found to be toxic, as defined in the Hazardous Chemicals Rules, 1989 (Schedule I), the state boards in such cases shall direct the industries to install tertiary treatment system within the stipulated time limit. Otherwise COD may not be stipulated. This may be done on a case-to-case basis.

**Source : EPA Notification
[GSR 176(E) : April 2, 1996]**