Annexure 7-2: Standards for Off-shore and On-Shore Disposal of Dredge Material

No specific standards are defined in India for disposal of dredged material. If dredged material is toxic / harmful then these sediments should either be disposed off in landfill or in Sea. Criteria followed in Japan are given below.

A. Ontena for harman bottom beaments, bapan (unit. ingn)		
Contaminated Material	Dumping in Landfills (mg/l)	Dumping at sea (mg/l)
Alkyl mercuric compounds	Not detectable	Not detectable
Mercury and its compounds	0.005	0.005
Cadmium and its compounds	0.1	0.1
Lead and its compounds	1	1
Organophosphorus	1	1
compounds		
Chromium (VI) compounds	0.5	0.5
Arsenic and its compounds	0.5	0.5
Cyanogen compounds	1	1
PCB	0.003	0.003
Copper and its compounds	-	3
Zinc and its compounds	-	5
Fluoride	-	15

A. Criteria for Harmful Bottom Sediments, Japan (unit: mg/l)

Note: Criteria are based on the examination of dissolution of contaminated materials *Source: Assessment of the Environmental Impact of Port Development, United Nations, New York, 1992*

Criteria for Off-shore dumping of Dredged material: No criteria are defined for off-shore disposal of dredged material in India, thus reference to the UN standards can be made and is given below

Substance	Canada	USA	
PCB (ppb)	100	380	
Hg (ppm)	0.5	0.15	
Cd (ppm)	0.60	0.7	
Zn (ppm)	169	105	
Cu (ppm)	45	68	
As (ppm)	(5 – 25)	12.5	
Pb (ppm)	45	33	
Organochlorine pesticide (ppb)	10	5.0	
	for any compound	Sum of DDT, DDE and DDD	
Polyromantic hydrocarbon (ppb)	(1,000) Sum of 16 compounds	680	
		Sum of six low mol. Wt.	
		compounds	
		2,690	
		Sum of 10 high mol. Wt.	
		compounds	

B. Criteria for Off-Shore Dumping of Dredged Material (unit: ppm or ppb)

Source: Assessment of the Environmental Impact of Port Development, United Nations, New York, 1992