

Benefits assessment for sludge solidification in Urban Rivers

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Abstract: In-stream source pollution becomes the key factor affecting water environmental quality since point source pollution and non-point source pollution are almost under control. Many urban rivers are heavily silted up due to the rapid urbanization. The constituent of sludge has the characteristics of complexity and large quantity. The main content of benefits assessment for sludge solidification in urban rivers is put forward in this study, in order to promote its application in current economic society. A few engineering works in Wuxi city are taken as examples to evaluate the benefits. The result indicates that the economic, ecological environmental and social benefits of the three sludge solidification projects are RMB 1676.94, 217.12, 2503.39 millions respectively. The total benefit is RMB 4397.45 millions, the cost is RMB 222.80 millions and, the ratio of benefits to cost is 20, which demonstrates convincingly that the benefits of implementing the technology are very high.

Key words: urban river; sludge solidification; benefit assessment