Development of Dredging Index for Coastal Pollution Control

Chan-Won Lee⁽¹⁾, Young-Tack Kwon⁽¹⁾ and See-Whan Kang⁽²⁾

- ⁽¹⁾ Department of Environmental Protection, Kyungnam University, 449 Wolyoungdong, Masan, Kyungnam, South Korea Tel +551-249-2247 / 2970 Fax +551-249-2563 e-mail: water@kyungnam.ac.kr
- ⁽²⁾ Coastal and Port Engineering Research Center, KORDI, 1270 Sadong, Ansan, Kyungki, South Korea

Abstract

Dredging of contaminated sediments is one option often considered for remediation in coastal waters. There is a need to determine hot spots, areas of concern, and areas of not polluted in terms of contaminants concerned. Dredging index was developed for the judgement of dredging by combining four numerical sets of sediment quality criteria into a quadrodiagram. Data were compared from studied areas to have decisive dredging index values for judgement of dredging and evaluation of ecological changes. Quadrodiagram and DI values give us a good graphical comparison and numerical values to distinguish the seriousness of sediments.