



Input Quantity and Distribution of Hexachlorocyclohexane (HCH) in the Jiaozhou Bay Waters

PDF (Size: 1800KB) PP. 140-148 DOI: 10.4236/jwarp.2012.43017

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ABSTRACT

Based on data from the investigation in Jiaozhou bay waters in May, July and November in 1987, the distribution, source and seasonal variation of HCH in Jiaozhou Bay are analyzed. The results showed that in Jiaozhou bay HCH content was very low and less than 0.100 µg/L in this year, and better than the national Category I of the sea water quality standard, and the water quality about HCH was very clean; and that The seasonal variation of the HCH content in Jiaozhou bay waters has already vanished, namely, the seasonal variation of the HCH content in this year was not influenced by the rainfall, the runoffs or rivers. The horizontal distributions of the HCH content in the whole bay waters showed that the HCH content in the bay was not only directly input from both runoffs but also from rivers, the HCH source was area-source and came from land. The vertical distributions of the HCH content in the whole bay waters showed that the change of the HCH content at surface was not consistent with the corresponding one at bottom, and that the trend of the HCH distribution at surface was not consistent with that at bottom, and that only the HCH contents at surface and bottom were very close. From the year of four years ago of the prohibition (1979), to the prohibition year of HCH use (1983), and finally to the year after the four years of the prohibition (1987), The change of the HCH input into the bay waters unveiled that the by four years before the prohibition, the pollution of the HCH on land was very grave, and by four years after the prohibition, the HCH content in waters was very low, whose process represented that the process of human being having broken up the earth and the process of the earth having naturally restored. Therefore, Human being would consider not only for own benefits but also for the sustainable development of environment.

KEYWORDS

HCH; Distribution; Prohibition; Input Quantity; Jiaozhou Bay

Cite this paper

D. Yang, Z. Ding, Z. Miao, H. Xu and H. Bai, "Input Quantity and Distribution of Hexachlorocyclohexane (HCH) in the Jiaozhou Bay Waters," *Journal of Water Resource and Protection*, Vol. 4 No. 3, 2012, pp. 140-148. doi: 10.4236/jwarp.2012.43017.

References

- [1] G. H. Shi, " A Life of Pesticide," Shanghai Scientific Popular Press, Shanghai, 1992, pp. 85-90.
- [2] W. Dou and Z. X. Zhao, " Biologic Concentration of BHC and DDT in Hydrophilous Food Chain in Baiyang Shallow Lake," *Environmental Science*, Vol. 18, No. 5, 1997, pp. 41-43.
- [3] B. X. Mai, Z. Lin and G. Zhang, " The Organic Pollutant Study of the Distribution and Characteristics of Polycyclic Aromatic Hydrocarbons and Organic Chlorine Pesticides in the Surface of the Sediment in the Zhujiang Estuary and Delta River," *Journal of Environmental Science*, Vol. 20, No. 2, 2000, pp. 192-197.
- [4] T. X. Gu, X. Y. Xu and T. F. Zhang, " Organic Chlorine Pesticide and PCBs in Bohai Bay," *Marine Scientific Collected Papers*, Vol. 29, 1988, pp. 77-85.
- [5] D. F. Yang, Z. H. Gao, H. R. Cao, G. Y. Wen and L. L. Sun, " The Distribution and Transfer of HCH in Jiaozhou Bay," *Coastal Engineering*, Vol. 27, No. 2, 2008, pp. 65- 71.

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- [6] D. F. Yang, Z. H. Gao, P. Y. Sun, L. L. Wang and L. Xie, " The Distribution and Content of HCH in Spring and Summer in Jiaozhou Bay," Coastal Engineering, Vol. 28, No. 2, 2009, pp. 69-77.
- [7] D. F. Yang, Z. H. Gao, H. Huang, J. H. Guo and Y. C. Zhang, " The Distribution and Pollution Source of HCH in Jiaozhou Bay," Coastal Engineering, Vol. 28, No. 4, 2009, pp. 69-79.
- [8] D. F. Yang, Q. Shi, J. H. Guo, W. Tang and Z. R. Ding, " The Distribution and Dilution Process of HCH in Jiaozhou Bay," Coastal Engineering, Vol. 29, No. 1, 2010, pp. 59-66.
- [9] D. F. Yang, J. H. Guo, Z. R. Ding , S. Y. Wu and Q. Shi, " The Distribution and Remnant of HCH in Jiaozhou Bay," Coastal Engineering, Vol. 29, No. 2, 2010, pp. 72-76.
- [10] D. F. Yang, Z. R. Ding, L. Zheng, Z. G. Bu and Q. Shi, " The Distribution and Uniformity of HCH in Jiaozhou Bay," Coastal Engineering, Vol. 30, No. 2, 2011, pp. 66-74.
- [11] D. F. Yang, L. Zheng, H. H. Jiang, Q. Shi and Z. R. Ding, " The Distribution and Water Quality Standard of HCH in Jiaozhou Bay," Coastal Engineering, Vol. 30, No. 4, 2011, pp. 56-65.