

DETRMINATION OF ENVIRONMENTAL POLLUTION IN KARUN SEDIEMTS, KHUZESTAN - SW.IRAN.

B.A.Habibnia ,K.Behzadi, H.Imam,

University of Petroleum Industry - Ahwaz Fax:0098611448056

A. Rocky, N.I.O.C., Geology Division, Ahwaz

**M.Sadrynasab, Institute of Oceanography, Chamran University -
Ahwaz - IRAN**

ABSTRACT, The Karun river is one of the longest rivers in Khuzestan State, South West Iran and is the only main source of drinking water for the province. Due to presence of oil wells, oil units operations, lack of dredging and increase of waste water, sewage, form industrial, agricultural and chemical plants, Karun sediments have become one of the most polluted rivers in Iran. The present research paper deals with simultaneous close collection of water and sediment samples from 28 stations , of a distance about 40 Kms. on the river sides around Ahwaz city, Iran. Of these, 22 sediments (clay, sand, silt) samples were washed by 560,450,350,250,180 mesh sieves and the polluted sediments were studied under microscope. The ratio of pollution effect on various Ostracodes and Charophta, bodies were noticeable.

Besides, different metal and non - metallic minerals were found in the river bed. The measurement of heavy metals like Cd,Pb, Cu and Zn in water has been made by atomic absorption device (Shimadzu Company model AA680) with graphic furnace. The lowest and highest water pollutants in the area were pointed out. Hence, the above data indicate that the amount of water contamination in the Karun river is higher than the World Health Orgaization (WHO) Standards.