

A Study on Effect of Almahdi Aluminium Factory of Bandar Abbas on Environment Status of the Region with an Emphasis on Measuring of Some Scarce Metals Existing in the Air (Atmosphere)

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Abstract : Today, industry is one of the indices of growth and development of countries and is a suitable applicable criterion to compare the countries. Bandar Abbas has a high industrial centralization in term of geographical redundancy of industries in comparison with other rural and urban places of Hormozgan province. Most important and major industries of the province are located in Bandar abbas eighth refinery, power plant, zinc melting company, Almahdi Aluminium, Hormozgan steel, south steel, which are the most important of these industries. So, it is necessary to study pollution from these industries and their destructive effects on environment of region. In respect of these things, general purpose of this research is coding and presenting managing solution of Almahdi Aluminium factory in them of measuring of air (atmosphere) parameters. For gaining this purpose it is necessary to determine measure of heavy metals suspension in the air (atmosphere) in the neighborhood of industries and also in residential regions close to them as partial purposes. So, for achieving the purposes above, operation of sampling from the air in two hot and cold seasons of the year (2010-2011) was performed, after field reviews to recognize the sources of effluence and to choose place of sampling stations. Sampling and preparation way to read was based on EPA and NIOSH. Also, decreasing process was included Fe>Al>Cd>Pb>Ni respectively, in term of results gaining from sampling of ingredients existing in the air (atmosphere). Also Ni and Fe elements in samples of air were higher than permissive measure in both of cold and hot season. Average of these two metals was 34% and 33% in cold season and 44% and 34% micrograms/m³ in hot season. Finally, suitable managing solutions to improve existing situation is presented in term for all results.

Keywords : Almahdi aluminium factory, Bandar Abbas, scarce metals, atmosphere

Conference Title : ICFAEST 2014 : International Conference on Fisheries, Aquaculture Economics and Seafood Trade

Conference Location : Barcelona, Spain

Conference Dates : October 27-28, 2014