Bacterial Quality Of Coastal Waters Of Annaba After The Commissioning

Sabrina Hidouci (1), Abdallah Borhane Djebar (2), Rachid Amara (3) and Houssem Sahraoui (1,4)

(1) University Kasdi Merbah BP 511 Road of Ghardaia, 30000 Ouargla , Algeria

Telephone: 213 669806743 Email: bioannaba@yahoo.fr

(2) Laboratory of Marine Environments Ecobiology and Littorals - University Badji Mokhtar BP 12, 23000 Annaba , Algeria

Telephone: 213 38871062 Email: djebarborhane2000@yahoo.fr

(3) Maison de la Recherche en Environnement Naturel -Université du littoral côte d'opale 32 avenue Foch , 62930 Wimereux. , France

Telephone: 33 03.21.99.64.34 Email: rachid.amara@univ-littoral.fr

(4) Telephone: 213 778404078 Email: s houss@yahoo.fr

With a distance of nearly 50 km, Annaba coast situated at the east of Algeria, offers an exceptional maritime front attracting 2 at 3 million tourists each year. It also represents the ranging pole of heavy industry in Algeria. Among other arcelor mital, ASMIDAL, Orelait, ENCG use sea water in their manufacturing process or as a direct or indirect receptacle of their discharges, causing its contamination. The wastewater treatment is intended to clear into the natural environment sufficient quality water altering the less possible the environment. For this we proceed to a comparative study of the bacterial quality of coastal waters in the city of Annaba, before and after the commissioning of the first sewage plant of Annaba located in Lallelick distant of nearly 10 kilometers to the southeast, operating since 2010 with a capacity of 683,000 population equivalents. The results show a decrease in bacterial contamination including the Total Coliforms and Escherichia coli in summer 2011, after the commissioning of the sewage plant with respective average rates of 87 and 37 bact/100 Ml, against rates up to 1100 and 460 bact/100Ml seawater was recorded in 2007, 2008, 2009 and 2010. The realization of the sewage plant is part of the national action plan to reduce marine pollution from land-based activities since 2002 with the promulgation of a series of laws, including the Law coastal, the waste Act and the environment Act in the context of sustainable development. Keywords: STEP, contamination, bacteria, coastline, Annaba.