

The Impact of Air Pollution on Health and the Environment: The Case of Cement Beni-Saf, Western Algeria

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Abstract : The air like water is an essential element for living beings. Each day, a man breathes about 20m³ of air. It originally consists of a set of gas whose presence and concentrations correspond to the needs of life. This study focuses on air pollution by smoke and dust emitted from the chimney of the cement works of Beni Saf, pathological and their impact on the environment. Dust of the cement plant are harmless to permissible levels for living organisms, but the two combined phenomena namely the release of dust and aridity of the climate, which severely marked area of Beni Saf; have contributed adverse effects in on human health and the degradation of vegetation cover and species especially weakened by environmental stress. The most visible impact is certainly the deposition of dust on the surrounding areas of the cement factory, and seriously affecting the aesthetics of the landscape. Health problems are more important inside and outside the factory. Among the diseases notable caused by the cement works are: deafness, heart disease, asthma and mental. The dust of the cement works is mainly composed of fine particles of limestone, clay, free lime, silicates and also loaded of the gases such as carbon dioxide gas CO₂. The accumulation of this gas in the atmosphere is directly involved in the phenomenon of increasing of greenhouse effect. Some gases, for example, are directly toxic. They can change the climate, changing precipitation types and become a greater source of stress by drought, etc. The environment also suffers from air pollution indirectly; it is more precisely the acid rain. They are produced by the combustion of non-metals in air. Acid rain has consequences for contaminating the soil, weakening the flora, fauna and acidifies lakes. Finally, the pollution problems are multiple and specific dust. It can worsen and change, it has reached epidemic proportions quantitatively and qualitatively disturbing and unpredictable.

Keywords : atmospheric pollution, cement, dust, environment

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