

AIR AND WATER POLLUTIONS AND SUITABLE MEASURES FOR REMEDIATION WITH SPECIAL REFERENCE TO BIOLOGICAL METHODS

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ABSTRACT: Pollution, also called environmental pollution is the addition of any substance (solid, liquid and gas) or any form of energy to the environment which is harmful to living beings. It is the man-induced change leading to deterioration of natural environment in quality. It may also be caused by natural events such as forest fires and active volcanoes. The major kinds of pollution are air pollution, water pollution and land/soil pollution. Air pollution refers to physical, chemical or biological change in the air. It is the contamination of air by harmful gases, dust or smoke which affects the plants, animals and humans drastically. Water pollution is the contamination of water bodies (e.g. lakes, rivers, oceans, ground water) very often by human activities. Land pollution/degradation is anthropogenic or natural process which impairs the capacity of the land to function. It refers to an appreciable loss of soil productivity and is defined as a process which lowers the current and/or potential capability of soil to produce goods and services. In the present review, the effects of air, water and land/soil pollutions have been discussed in length and the remediation measures have been suggested.

Keywords: Pollution, air, water, land/soil, their effects, remediation measures

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INTRODUCTION

Pollution is the defilement of the natural environment by a pollutant, a by-product of human activities which enters or becomes concentrated in the environment, where it may cause injury to humans or desirable species. In other words, the presence of harmful substances in the air, water and land which can have an adverse effect on living beings and on the environment is pollution. It is a negative/undesirable change in the

environment, usually the addition of something hazardous or detrimental which may be solid, liquid or gas or any form of energy such as heat, sound or radioactivity at a rate faster than it can be dispersed, diluted, decomposed, recycled or stored in some harmless forms. It is the maninduced change leading to deterioration of natural environment in quality. According to the environmental campaign organization (WWF): "Pollution from toxic chemicals is threatening life