

## A Short Note on Radioactive Pollution

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### Short Communication

Radioactive materials are those materials or elements that emit radiation, thus they're not stable and obtain transformed into other radioactive or non-radioactive materials. The harm that they will cause depends on the radioactive elements and their half time function (the time needed for his or her concentration to be reduced to half thanks to decay processes). Basically, the upper the half-time, the lower the consequences on human health.

The proportion of radioactive pollution is 15% of the entire energy of the explosion. Radioactive pollution of water, water sources, and air space is that the results of radioactive fallout from the cloud of a atomic explosion. Radionuclides are the most sources of pollution; they emit beta particles and gamma rays, radioactive substances.

In the postmodern world, various sorts of energy are being discovered. Among them is atomic energy, which is touted to be the foremost potent source of energy thanks to its high latent power. Reports indicate that the high latent power is thanks to its high level of radiation.

The use of nuclear missiles and atomic bombs, a sort of atomic energy, within the Second war explains not only the cause but also the damaging nature of radioactive pollution or contamination.

Mining mostly involves the excavation of the mineral ores, which are then broken into smaller, manageable pieces. Radium and Uranium, as an example, are present within the environment and are equally radioactive.

Radioactivity is toxic because it forms ions when it reacts with biological molecules. These ions can form free radicals, which damage proteins, membranes, and nucleic acids. Radioactivity can damage DNA (deoxyribonucleic acid) by destroying individual bases (particularly thymine), by breaking single strands, by breaking double strands, by cross-linking different DNA strands, and by cross-linking DNA and proteins. Damage to DNA can cause cancers, birth defects, and even death.

Every exposure to radiation increases the danger of injury to tissues, cells, DNA and other vital molecules. Each exposure potentially can cause programmed necrobiosis, genetic mutations, cancers, leukemia, birth defects, and reproductive, immune and system disorders. there's no safe threshold to exposure to radiation.

Government regulations allow radioactive water to be released from Indian Point atomic power plant to the environment containing "permissible" levels of contamination. However, since there's no safe threshold to exposure to radiation, permissible doesn't mean safe.

Radioactive by-products continue giving off dangerous radioactive particles and rays for enormously long periods - described in terms of half lives. A material gives off hazardous radiation for a minimum of ten half-lives. one among the radioactive isotopes of iodine (iodine-129) features a half-life of 16 million years; technetium-99 features a half-life of 211,000 years; and plutonium-239 features a half-life of 24,000 years. Xenon-135, a inert gas, decays into cesium-135, an isotope with a 2.3 million year half-life.

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Received date: July 18, 2020; Accepted date: July 22, 2020; Published date: July 28, 2020

Citation: Thomas J (2020) Jawaharlal Nehru University, Hyderabad, India. J Pollut Eff Cont 8:250. doi:10.35248/2375-4397.20.8.250.

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