

I'm not robot!



Pollution

- anything that harms the natural environment
- human activity causes pollution
- harm to Earth's air, water, or land



Air pollution

Human studies suggest PFAS exposure may...

- increase risk of thyroid disease
- increase blood cholesterol levels
- decrease the body's response to vaccines
- decrease fertility in women
- increase risk of high blood pressure & preeclampsia
- lower infant birth weight

in adults | in children | in pregnant women

Information sourced from Agency for Toxic Substances and Disease Registry

Effects of air pollution on materials ppt. What are 4 effects of air pollution. Give three effects of air pollution on materials. Effects of air pollution on materials on vegetation and on health. What are the 10 effects of air pollution. What are the bad effects of air pollution. What are impacts of air pollution. Effects of air pollution on materials wikipedia.

Research Article Volume 5 Issue 2 1Air Pollution Research Department, Environmental Research Division, National Research Centre, Egypt2Refractories, Ceramics & Building Materials Department, Inorganic Chemical Industries and Mineral Resources Research division, National Research Centre, Egypt Correspondence: Atef MF Mohammed, Air Pollution Research Department, Environmental Research Division, National Research Centre, Giza, Egypt Received: April 06, 2021 | Published: April 23, 2021 Citation: Saleh IA, El-Hemaly SAS, Mohammed AMF. Impact of air pollutants on some building materials in Cairo atmosphere. Material Sci & Eng. 2021;5(2):49-58. DOI: 10.15406/msej.2021.05.00156 Download PDF Abstract Damage of materials is one of the most important adverse effects of air pollutants. The present investigation was undertaken to identify the extent of damage caused to some building materials by air pollutants in Cairo atmosphere and to what extent the pollutants accelerate the "natural" corrosion of materials. Samples of six different types of building materials (limestone, sand-lime brick, neat cement blocks, industrial gypsum samples and LECA samples) were exposed to the ambient atmosphere for a period of three successive years at five locations, having different loads of air pollution represent residential and industrial areas through Cairo City. The changes in physical and chemical properties of the exposed materials were determined. It was found that the deterioration of building materials, exposed to Cairo city, was high related to the atmospheric pollution load with reference to sulfate, chloride and nitrate concentrations. Higher correlation coefficients bet ween the compressive strength losses and the atmospheric SO2 and NO2 doses were found for cement block and limestone samples. The mineralogical composition (X-ray diffraction) of the product films of the exposed building materials showed the formation of gypsum and hydrated calcium silicate components in the building materials and cement content. Keywords: air pollution, gaseous pollutants, particulate matter, deterioration, building materials Gaseous and particulate air pollutants are significantly affect non-biological materials. Of particular importance are effects on building stones, historic and cultural monuments, which create an important part of our cultural heritage.1-3 The effect of the deposition of atmospheric gases and aerosols on building materials constitutes one of the main damage mechanisms threatening the cultural heritage. Physical changes and chemical interaction occur at the building surface when exposed to outdoor atmosphere. The action of chemicals usually results in irreversible changes.

