

Environmental pollution

مقال من إعداد - review article

Fanar Dawas Mahmood

Fanaromar81@ gmail. com

Department of Education Nineveh

ABSTRACT

Environmental pollution means (the entry of solid, gaseous, or liquid energy or any form of energy such as heat or sound into the environment, making it unsafe to live in, or exceeding the proportions that can be absorbed by the environment, analyzed, or converted into substantive materials).

These pollutants may be either harmful substances or natural substances.

Environmental pollution is one of the serious challenges facing the world today, which requires concerted efforts to reduce its negative effects, not only on humans but on all living organisms with which humans share this planet.

Key words: pollution, air, soil, Environmental.

Environmental pollution

التلوث البيئي

م.د. فناردواس محمود

وزارة التربية/ المديرية العامة لتربية نينوى

المخلص

يقصد بالتلوث البيئي (دخول الطاقة الصلبة او الغازية او السائلة او اي شكل من اشكال الطاقة مثل الحرارة او الصوت في البيئة ، مما يجعلها غير امنة للعيش فيها او تجاوز النسب التي يمكن ان تمتصها البيئة او تحليلها او تحويلها الى مواد موضوعية وقد تكون هذه الملوثات اما مواد ضارة او مواد طبيعية

التلوث البيئي هو احد التحديات الخطيرة التي تواجه العالم مما يتطلب بذل جهود متضافرة للحد من اثاره السلبية ليس فقط على البشر ولكن على جميع الكائنات الحية التي يشترك فيها البشر في هذا الكوكب

الكلمات المفتاحية: التلوث ، البيئي، الهواء ، التربة.

Types of pollution

There are several types of environmental pollution, as follows:

• Air pollution

The air becomes polluted when it is mixed with harmful substances, such as carbon monoxide, sulfur dioxide, nitrogen oxides, ozone, and lead. Air pollution may result from some natural disasters, such as forest fires and volcanoes, or from human activities that produce pollutants, such as: smoke resulting from Burning fossil fuels and car exhausts

•Water Pollution:

Water pollution means the arrival of some harmful substances into bodies of water, including rivers, oceans, lakes, streams, and groundwater, which leads to a change in their characteristics, making it difficult to use water in a safe manner, and also affects the functions of water in systems. different environmental. Examples of substances that pollute bodies of water include: pathogenic microorganisms, radioactive materials, friable organic waste, toxic chemicals, oil, and other materials.

• Noise pollution:

means excessive or unwanted sounds, which may affect human health and the quality of the environment, and the intensity of noise is measured in decibels, Noise pollution is linked to industrial development, construction activities, and means of transportation such as airplanes, trains, etc.

• Soil pollution:

Soil becomes polluted as a result of mixing with chemicals or harmful substances, and pollution occurs directly or indirectly. This is the result of human activities, such as: industrial activities, agricultural

operations, dumping waste on the ground, and oil leakage during storage or transportation. The soil is also polluted when mixed with acid rain.

- **Thermal pollution:**

Thermal pollution: is the sudden change in the temperature of water bodies for natural reasons, such as the explosion of volcanoes, or as a result of human activities, and the change may be an increase or decrease in temperature. Thermal pollution results from the use of water to cool power plants, factories, and the return of water after it becomes hot to its sources, or as a result of running water on hot paved surfaces in the summer, such as parking lots and roads, it gains heat and enters sewage networks and water bodies; raises their heat, and thermal pollution can also result from soil erosion, making water bodies more exposed to sunlight. Thermal pollution affects marine life and various ecosystems

- **Light pollution:**

Light pollution occurs as a result of excessive use of artificial lights at night, affecting human and wildlife health, increasing energy consumption, and disrupting astronomical research

- **Radioactive contamination:**

Radioactive contamination It results from the leakage of radioactive materials from nuclear power plants into the air, water, or soil. As a result of human activity, such as uranium mining operations, improper disposal of nuclear waste, or the use of nuclear weapons, one of the most important health risks resulting from radioactive contamination is an increase in the incidence of cancer.

Environmental pollution damage

The damage resulting from environmental pollution is the spread of diseases: Air pollution causes many diseases in humans, including respiratory system diseases such as: asthma, allergies, and may cause heart disease, blood vessels, and cancer, and pollution may lead to other rare diseases, such as: hormonal disorders. Hepatitis, typhoid and diarrhea.

The impact of pollution in all its forms on human health can be estimated if it is known that air pollution alone causes the death of more than two million people annually, according to a report published by the Journal of Environmental Research Letters. Death of living organisms: Environmental pollution causes the death of living organisms. For several reasons, including:

- 1– Damage the natural habitats of terrestrial and marine organisms, and increase their toxicity.
 - 2– Changing the composition of rivers and seas due to acid rain, becoming toxic to fish.
 - 3– Lung disease; due to the presence of ozone in the lower atmosphere.
 - 4– Increased concentration of nitrogen and phosphates in water encourages the growth of toxic algae, which in turn hinders the normal growth of other organisms.
 - 5– Death of microorganisms. As a result of soil pollution, which affects the first level of the food chain, and the destruction of trees as a result of acid rain ,in addition to this the accumulation of ozone in the lower atmosphere, which leads to trees stopping breathing.
 - 6– Earth's warming above normal: This is due to the absorption of some gases, such as carbon dioxide, or sulfur dioxide to infrared rays, and their confinement in the Earth's atmosphere, and this phenomenon is called the green house effect, or global warming.
- Solutions to reduce environmental pollution

To reduce environmental pollution, we suggest several solutions:

1. Replacing fossil fuels that cause air pollution with alternative energy sources such as wind energy, solar energy, geothermal energy, wave energy, etc
2. Using cars powered by electricity or solar energy instead of cars powered by fossil fuels.
3. Rationalizing the use of heating and cooling means in homes, and replacing them with energy-saving buildings, which depend on the correct choice of location, design, and insulation materials.
4. Rationalizing the use of transportation,
5. Rationalizing the use of chemical fertilizers, and using organic fertilizers instead.
6. Preventing overgrazing that leads to soil degradation.

References

- 1– www.britannica.com, Retrieved 6–10–2017. ↑ "Air Pollution Jerry Nathanson
- 2–. www.encyclopedia.com, Retrieved 22–10–2017 " Water "pollution
- 3– www.britannica.com, Retrieved 22–10–2017. ↑ Richard E. Berg, Jerry A. Nathanson,
- 4–Noise pollution" ,www.britannica.com, Retrieved 22–10–2017.
- "What is Soil Pollution?"
- 5– www.conserve-energy-future.com, Retrieved 22–10–2017.. "What is Thermal Pollution?",
- 6–www.conserve-energy-future.com, Retrieved 22–10–2017. Edited.
- "What is Light Pollution?"
- 7–, www.conserve-energy-future.com, Retrieved 22–10–2017. Edited.

"Radioactive Pollution",

8-www.encyclopedia.com, Retrieved 22-10-2017. "Environmental Pollution",

9- www.conserve-energy-future.com, Retrieved 6-10-2017., Alina Bradford (10-3-2015), "Pollution Facts & Types of Pollution",

10- www.livescience.com, Retrieved 8-11-2017. .

11- Vijayalaxmi Kinhal, "Ways to Stop Pollution"greenliving.lovetoknow.com, Retrieved 6-10-2017.

.