

P 30. OPEN MINES AND ENVIRONMENTAL PROBLEMS

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ABSTRACT: Many environmental problems may arise in the vicinity of open pit mines. These include water pollution, green tissue damage, soil pollution, image pollution, acid mine drainage, gas and dust emissions. In addition, the removal of the surface soil with open mining and the destruction of the forest areas in general and changing the soil profile in such regions is also an important problem in terms of soil quality. In open mines, pollutants in different gas and particulate form are also released during production. These emissions can be seen during drilling, blasting, transportation, unloading, storage. These emissions can be seen during drilling, blasting, transportation, unloading, storage. These pollutants can affect not only the quarry area but also the near and far surroundings. Atmospheric conditions, the size and shape of particulate matter are also important in this transport of pollutants. Fine particles can also be transported to long distances for long periods of time. Human and living health can be affected by this situation and structural materials may be damaged. The most common effects on human health can be listed as asthma crises, decreased lung function, dyspnea, irregularities in heart rhythm, before time deaths from heart lung diseases according to the duration and concentration of exposure to dust. This study includes a literature review on the environmental problems, particulate pollution and effects of open mines.

Keywords: open mining, environmental problems, particulate matter, human health