



**Author(s): Mohammed shebeeb abed**

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**Abstract:**

For the purpose of assessing air pollution in the Doura power station and the statement of environmental effects on the workers inside the plant and residential areas nearby and the surrounding Were selected (11) sites within and outside the station to determine the concentrations of the minutes of plankton and concentrations of lead P-air in addition to measuring the elements of climate (temperature, relative humidity and wind speed and direction) and also random sample was selected from workers inside the station to determine the concentrations of lead in their blood, as well as account Concentrations of lead in some kinds of plants such as buckthorn leaf and plant oleander in some sites.

The number of samples were collected (156 ) sample of: (124) air samples inside and outside the station, (20) of blood samples working in the station ,(12) samples of leaf plants inside the station. has been the modeling process of the air from inside and outside the station for periods of morning and evening and quarterly Winter and summer. The results revealed high concentrations of outstanding minutes in the air station, particularly in the sites of production units and sites close to the steam units, and they exceed the allowable parameters of nationally and internationally. The concentrations of lead has reached the highest values in the site fuel pumps and steam units steam sites. The study showed that the concentration of lead depends on the type of fuel used in furnaces

And the percentage of impurities in and on the combustion process and the efficiency of production units, and concentration in the blood of the workers who exceed the age of (40) years is higher than the concentrations of lead for the reconstruction of less than (40) years old. and that medical tests( hp, pcv, wpc )some of them noted Where a slight decrease compared with the standard delimiters. and finally also been noted that concentrations of lead in blood of workers and operators of boilers, steam and gas units Are higher concentrations of lead for the rest of the sites, as it is higher than the normal range of lead concentration in the blood.

The health impact of pollutants emitted on the workers and citizens living near or next to the station was very clear, through the questionnaire, which was conducted, where it was noted that more diseases suffered by nearby residents of the station is heart disease, allergies and respiratory diseases and asthma. The case of the deaths are mostly caused by cancer and heart disease. May be divorced solid (minutes pending and lead), as well as divorced gas (CO, SO<sub>2</sub>, NO<sub>2</sub>,...) the cause of these diseases and deaths.