

## **Groundwater Pollution with Oil Products-Ploiesti Case (Romania)**

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Ploiesti lies on Prahova-Teleajen alluvial fan, which is one of the first ten big underground water structure in Romania.

The region belongs to internal side of the Carpathian foredeep formed of Miocene, Pliocene and lower Pleistocene distorted deposits. The saliferous miocene formation had an important role in the genesis of the structure, resulting the dyapires pillows of Ploiesti structure.

There are a lot of industrial units within the above mentioned area, that are sources of pollution: refineries, railway stations, fuel pumping stations, fuel, pipelines for oil transport, tanks for petroleum residues.

Hydrographical and chemical data of the samples taken from drillings and wells have been classified, processed and interpreted in maps concerning the geometry of aquifer, the expansion and evolution of the polluted area. It has been pointed out a bed of oil products that goes NV-SE with a speed of 25-200 mm/year and has a long time ecological impact: potable water pollution from groundwater table, surface water pollution, soil and agricultural areas pollution. Should the polluted front reach Prahova and Teleajen river confluence, an ecological disaster will be produced and Romanian Plaine will be affected and even the Danube Delta biological reservation.

The study suggests the permanent monitoring of contamination processes by means of a well defined network and polluted factors removal by constructive remedies.