

Breathing of Land

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Geo-pollution includes the pollution of geological strata, groundwater, subsurface air and subsurface microbes. Polluted subsurface air may move upward to the surface, pollute the air where human beings are living and cause health problems. To monitor the pollution of air as well as climate variations, a monitoring system has been established near a landfill site of wastes for the purpose of managing geo-pollution hazards. The system includes 2 wells for monitoring groundwater, 8 holes for monitoring subsurface air pressures, gas concentrations as well as gas sampling. Differential pressure gauges, flowmeters, barometers, thermometers are set to detect the related items. The system also includes a set of equipments for analyzing the gas concentrations. Resolutions of the analyses are on the order of microgram per liter. The intervals of data acquisition are between 3 to 5 seconds. Monitoring results obtained by the present time illustrate the breathing of land.