



Air pollution with particulate matter and heavy metals of Kosova Thermal Power Plant[#]

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Abstract: Kosova is a mountainous farm region which at past was in the process of industrialization because of its reach coal and mineral resources. The problem of air pollution in the surroundings of Power Plants appeared as early as 1954 when Thermal Power Plant of Kosova has started work in Obiliq. The city of Obiliq, approximately 5 km north of Prishtina-capital of Kosova, is the site of one the largest air pollution. Coal - related industries have been a major element of the economy of Kosova, but created extensive health risk due to environmental pollution with PM and a variety of other substances. Electricity in Kosova is produced by two lignite-fired TPP (Thermal Power Plant) "Kosova A" - (five units) and "Kosova B" - (two units), with total installed generation capacity of 1,513 MW. Most of the units of the two thermal plants are in poor operating conditions so that the present available capacity of the system is only 841 MW. The combustion process leads to the generation of emissions to air, water and soil, of which emissions to the atmosphere are considered to be one of the main environment concerns. The most important emissions to air from the combustion of fossil fuels are SO₂, NO_x, particulate matter (PM), heavy metals and greenhouse gases such as CO₂. The problem with dust emissions is serious and apparently cannot be solved without major redesign of the boilers. Ash from the both power plants is currently transported by open belt conveyors and is deposited at dumpsites. No environmental protection measures in the dumpsites are taken to prevent ash spreading by wind. Deposition of ash in dumpsites must stop as soon as possible and instead use ash for backfilling of mined parts of the lignite mines. Closed belt conveyors should be used to prevent spreading of fine dust particles during transportation of ash.

Keywords: Fossil fuels, heavy metals, particulate matter

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