Terms used in official statistics

Particulates pollutants

Definition:
Emissions into the atmosphere particulate fragmentation macroscopic and colloidal whose concentration exceeds the average content of these substances in the clean air, negatively impacting on human health and the condition and quality of the environment.

They are divided according to particulates grain sizes into the following classes: - particulates of macroscopic dispersion of the grain from 1 to 1000 ^{2}m; - particulates of colloidal dispersion of the grain from 0,001 to 1^{2}m. Depending on the origin of particulates and fits form, the following division has been assumed: - dispersive particulates, formed in result of mechanical dispersion of solids (e.g. coal dust during coal crushing and grinding in power stations); - condensation particulates, formed in result of condensation and consolidation of vapour of various chemical substances (e.g. soot), general present only in colloidal break-up class. The formation of particulates pollutants is inseparably connected with all the production processes and combustion processes. A large amount of particulates pollutants is particularly produced during combustion of solid fuel. The amount and characteristics of particulates that are produced by the combustion of solid fuel depends on: - fuel - the degree of fragmentation, content and mineralogical composition of the ash, agglomerating capacity, content of volatile substances, humidity, etc.; - combustion conditions - the type of grate, the heat intensity of the combustion chamber, the combustion temperature, the flow of air and gases, etc. The metallurgical processes and the production of construction materials, especially cement, also generate a large amount of particulates. The particulates pollutants include: particulates from combustion of fuel, cement and lime particulates as well as particulates of fire resistant materials, silicate particulates, particulates of artificial fertilizers, carbon and graphite particulates, soot, particulates of lignite, surface active agents and polymers as well as especially dangerous particulates pollutants such as chromium, mercury, lead, cadmium, arsenic, zinc, manganese and others. The especially dangerous particulates include also aromatic hydrocarbons (including carcinogenic benzopyrene). Decisive in determining the degree of harmfulness of particulates is first of all their concentration in the atmosphere, chemical composition and mineral composition. The most toxic of mineral particulates is quartz.

Low-level terms:

- Emission of air pollutants
- Ambient concentration
- Suspended particulates

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