

Washington, with regional offices in each of the 10 regions and 27 laboratories. The Agency conducts the environmental assessment, does research and engages in educational work. Its job is to monitor the implementation of the adopted standards and norms, some of these responsibilities are delegated to the states. The agency has about 15,000 full-time employees, and also works with many people on a contract basis. In March 2017, the Trump administration proposed to reduce by one-quarter the budget of the Environmental Protection Agency. By 2018, environmental spending will be reduced by 25% - to \$ 6.1 billion. Each fifth employee will fall under the reduction. At the same time, Trump guarantees that the project will not endanger the safety of air and water. The cost of the program in 2018 will be \$ 29 million. Priority will be the sewage treatment programs, including industrial wastewater, and the modernization of the water supply system.

**Ethane** is a naturally gaseous straight-chain hydrocarbon ( $C_2H_6$ ) extracted from natural gas and refinery gas streams.

**Ethyl alcohol (ethanol or grain alcohol)** is an inflammable organic compound ( $C_2H_5OH$ ) formed during fermentation of sugars; used as an intoxicant and as a fuel.

**Evaporation** is the process of concentration of solutions by evaporation of the solvent; most often this process is carried out at elevated temperatures, sometimes boiling, and / or under vacuum.

**Exhaust gases** (off-gases) are the spent substances in the engine, products of oxidation and incomplete combustion of hydrocarbon fuel. Emissions of exhaust gases are the main reason for exceeding the permissible concentrations of toxic substances and carcinogens in the atmosphere of large cities, the formation of smogs, which are a frequent cause of poisoning in confined spaces.

**Exhaust gas recirculation of the vehicle's engine** is restart-up of the fulfilled gases in the system of the car's engine intake.

**Expanding clays** are clays that expand or swell in contact with water, e.g., montmorillonite.

**Expense ratio ( $\beta$ )** is the amount of raw materials, water or energy ( $Q$ ) spent on the production of a unit of mass or volume of the target product ( $m$ ). For raw materials,  $\beta$  is expressed in t/t,  $nm^3/t$ ,  $nm^3/nm^3$ ; for energy, respectively, in  $kW\cdot h/t$ ,  $kW\cdot h/nm^3$ .

**Explosive limits** are the limits of percentage composition of mixtures of gases and air within which an explosion takes place when the mixture is ignited.

**External surface** is an external surface of particles of catalysts and adsorbents without their internal porous structure (an internal surface). Usually, superficial pores and cavities are also referred to the external surface if their width exceeds the depth.

**Extinction** is disappearance of any systematic category of living species (from subspecies and higher) as a result of natural processes or human impact. In the epoch of extinction of dinosaurs, one species disappeared in 1000 years, from 1600 to 1950 - one species disappeared in 10 years, and now - 1 species per year.

**Extrudate** is a product obtained by extrusion.

**Extrusion** is a formation method in which a paste is extruded through a spinneret. The size of the holes in the spinneret determines the size and shape of the resulting particles. The quality of the product (extrudate) depends to a large degree on the water content and rheological properties in the initial paste, which are regulated by special additives.

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**Faujasite** is a naturally occurring silica-alumina ( $SiO_2-A1_2O_3$ ) mineral.

**Feedstock** is petroleum as it is fed to the refinery; a refinery product that is used as the raw material for another process; the term is also generally applied to raw materials used in other