

Volatility and loss of motor gasoline: Environmental and chemotological aspects

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Prevention of fuels losses is the one of the main directions of fuel and energy resources saving, that plays an important role in development of the economy. In fuel operations (storage, transportation, loading and unloading) used in fuel refineries, fuel depots, fuel terminals and gas station, there is a high possibility for fuel vapour being emitted from tanks, tankers or track tanks into the air, because both the fuel operation process is difficult to be supervised under full airtight condition and partial of components of fuel (hydrocarbon groups of paraffins, aromatics, olefin and other types) are easy to evaporate.

These losses appear because of various reasons and have different character and they can be divided into natural, operational and emergency. The problem of losses of fuels is not economic and power problem only; first of all, it is an important environmental problem. It is explained by the discharged fuel vapours that lead to serious harmful effects on people health and the environment. In fact, fuels losses get into the environment, contaminate soil, underground water and atmospheric air.

Organization of economy of fuels assumes a systematic comprehensive observing, systematic minimization and removal of all types of losses, at all stages of fuel transportation to the . During the last decades the problem of losses of fuels from evaporation was intensively in connection with of environmental situation, growing of motor transport and objects of their and service. These facts enhancement of European requirements fuel quality, used for motor transport, and to the fuels emissions into the atmosphere.

Biography

Larysa Chernyak has completed her Ph.D. (specialty 05.17.07- chemical technology of fuel and fuels and lubricating materials) at the age of 28 years from National Aviation University. She is the Lecturer (Assistant Professor), Department of Ecology, Institute of Environmental Safety, National Aviation University. Subjects: Aviation Chemmotology, Gas and Fuel, Control of fuels quality, Fuels, Aviation ecology, Aviation fuels and lubricants, Chemmotology. She has published more than 35 papers in reputed journals and international conferences.