

**ENGINEERING-GEOLOGICAL OR GEOECOLOGICAL PROCESSES AND PHENOMENA;  
THEIR DEVELOPMENT IN THE PRESENT-DAY ENVIRONMENT**

The authors consider theoretical issues of the present-day interpretation and applicability of the terms and concepts of the engineering geology and geoecology. The authors propose a new approach to the formulation of definitions of the founding concepts of major categories of the engineering geodynamics as the constituent part of the engineering geology. At the current stage of development of the geoecology, the processes and phenomena typical for the geological environment considered from the viewpoint of civil engineering are regarded as geoecological rather than engineering and geological.

Examples of incorrect interpretation of these concepts of engineering geology replace the study of the processes and phenomena of the engineering geology by the study of exogenous processes in the upper zone of the earth crust. Negative processes underway in the geological environment that are considered within the framework of the engineering geology should be assessed as geoecological. The assessment of the present-day use of the term "geoecological processes and phenomena" is based on the principle of indecomposability and unity of the geosphere. This fact serves as the basis for the modern interpretation of concepts of engineering geology or geoecology that relate to the geological environment and its use as the setting of construction works.

The authors demonstrate that the pollution of the atmospheric air or its transparency affect structures. It causes changes in the hydrogeological conditions that may cause a flood or reduction of the level of underground waters that influence the behaviour of bases of constructions. Anthropogenic impacts that cause the temperature and chemical pollution of the subterranean hydrosphere can lead to the dissolution of rocks, trigger karst processes, boost the speed of underground waters, and, thus, trigger the mechanical suffosion in the sands. The concept of geoecological processes and phenomena as the basic categories needs the assessment of the geological environment when exposed to the anthropogenic impact.

**Key words:** process, phenomenon, geoecological process, engineering geology, geodynamics, geoecology, flooding, karst, suffosion, landslip, earthquake, earth crust, ecosystem, biotope, geosphere.

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