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ENVIRONMENTÁLNA ANALÝZA DVOCH VARIANTOV STAVENISKOVEJ DOPRAVY PRE VÝSTAVBU RÝCHLOSTNEJ KOMUNIKÁCIE

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ABSTRACT:

Ladomerský L. & Hroncová E. **Environmental Analysis of Two Variants of Transportation on Motorway Building Site**

The article deals with the assessment and comparison of negative environmental impacts of two variants of building site transportation for the construction of the R1 motorway Rudno nad Hronom – Žarnovica (Slovakia). The basic variant of building site transportation was the transportation carried out on local roads (10,5 km in length). Alternative route using the existing sections of the motorway and constructing the connection temporary access road (12,5 km in length). The average daily intensity of building site freight transportation and heavy mechanization is 307 cars and it was necessary to transport up to 1 800 m^3 of materials daily. The synthetic indicator of environmental significance was calculated from the analysis of observed factors. On the basis of the synthetic indicator, it is stated that despite of the shorter route, the basic variant of building site transportation is highly dangerous and its realization was not recommended. A special economic analysis showed that when all environmental factors are taken into consideration, the alternative longer route is more convenient.

Key words: motorway, environmental impacts, emmission