

The Evaluation and Integration for Hazardous Materials Transportation Networks by Road and Emergency Response

Transportation Networks

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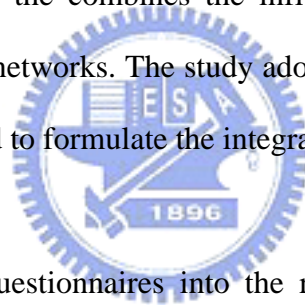
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ABSTRACT

The objectives of this study are to establish the hazardous materials transportation network by road integration procedure and assessment. First, the research understood and reviewed the present situation of hazardous materials transportation road networks. It is analyzed that the combines the influence factors of the hazardous materials transportation road networks. The study adopted system safety management theory and assessment method to formulate the integration procedure and assessment.



Then we preceded the questionnaires into the risk recognition of experts and scholars, and we assessed the degrees of all hazard factors and the whole system by means of hazard matrix assessment and hazard synthetic assessment. After questionnaires and assessment, we moved on the failure mode, effect, and critical analysis of all hazard factors this study selected on the strength of the method named FMECA. Finally, a example is demonstrated to show how to use this developed method to evaluate and integrate with the hazardous materials transportation and emergency response road networks.

***Keywords* : Networks Integration Procedure, Risk Assessment, System Safety Management.**