Plastic Waste of Low Density Polyethlene (Ldpe) Types in Asphalt Mixture

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Abstract

Road damage is often one of the causes of accidents. Road damage is a lot of damaged factors which cause overloading of vehicles and changes in weather (rain). Almost half of the road surface in Indonesia is flexible pavement. Flexible pavement made of asphalt is easily damaged. The limitation of providing asphalt as a component of the main material has become a separate obstacle. One step that can be done is to test plastic waste material (LDPE) as a mixture of asphalt. The purpose of this research is to find out the most ideal cost in making plastic asphalt. Research method in the form of experiments by means of experiments in the laboratory to obtain the desired plastic composition. The optimum composition and content of asphalt are used with the addition of percentage variations of 6, 7, and 8% of LDPE (low density polyethylene) type plastic waste in hot asphalt mixtures for AC-WC (asphalt concrete wearing coarse) layers. Wear layer which must be fulfilled by the special hot interim mix asphalt specification standard using Plastic Waste Directorate General of Highways 2017.

Keywords
Plastic Waste, LDPE (low density polyethylene), hot asphalt, Bina Marga 2017.

Biography

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