

**STATE OF THE ART REPORT OF
WASTE TYRE IN CIVIL ENGINEERING APPLICATION**

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**B. Eng (HONS) (CIVIL)
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IN CIVIL ENGINEERING APPLICATION**

By


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Report is submitted as the requirement for the degree of
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DECLARATION BY THE CANDIDATE

I (Lenny Binti A. Rahman, 2004117778) confirm that the work is my own and that appropriate credit has been given where reference has been made to the work of others.

( - 13th May 2007 -)

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ABSTRACT

This report depicts current technology, knowledge expansion, and research on the usage of waste tyre in civil engineering applications. The explanation in this report is expanding by scrutinizing the awareness on the necessities to recycled waste tyre, waste tyre analogy, legislations issued correlated and various advancement of recycled waste tyre in civil works in general. The significance and importance of curing the environment and various proposed managing the critical waste of tyre are discussed. Specific types of the most commonly used waste product derived from junk tyres are described, and their properties and characteristics are highlighted. The report summarizes some of the currently accepted concepts and theories in development of waste tyre rubber replacing aggregates in mass concrete. The physico-chemical characteristics and bonding of a rubber cement mixes, since many of these are applicable to the study of concrete performance. Current requirements in the standards of various countries are reviewed and discussed. Some of the recent research in the United States and other countries, related either directly or indirectly to the application of waste tyre in civil engineering practice, is concise. The report concludes with a discussion of the major areas of research needed to develop optimum usage of the waste tyre criteria for prospect of new class of concrete and simultaneously endeavour towards healthy environment.

Keywords: Waste tyre; civil engineering application; recycled