PROCEDURES FOR IDENTIFYING HAZARDS IN COMPONENT MATERIALS FOR ASPHALT

J. C. Nicholls *
Research Fellow, TRL Limited (UK)

V. Mouillet
Researcher, Laboratoire Régional des Ponts et Chaussées d’Aix-en-Provence (France)

B. Koenders
Researcher, Shell Bitumen (France)

F Deygout
Researcher, Shell Bitumen (France)

P. Samuel
Researcher, TRL Limited (UK)

*TRL Limited, Crowthorne House, Nine Mile Ride, Wokingham, Berkshire RG40 3GA, United Kingdom, cnicholls@trl.co.uk

ABSTRACT
The use of secondary component materials and recycling in the production of asphalt generally results in no exceptional hazards for operatives, the general public or the environment. However, such materials need to undergo a wide range of investigations to check their suitability because of the properties of the material. The wider use could mean that the use or re-use of some non-standard materials may have health, safety and environmental implications. Various strategies to promote the use of by-products could be considered for adoption, but are not the subject of this investigation. The overall aim of the task was to produce a methodology of testing components for potential hazards. For any procedure to be general and to allow for new hazards to be considered, the circumstances that maximise the risk during the extraction of the old pavement together with the manufacture, paving and use of the recycled material have to be included in the procedure. A procedure has been developed around two known hazardous component materials and four more general situations. Suitable tests have also been identified to check for such component material.

KEY WORDS: Health & safety, coal tar, sulphur, airborne particulates, ignition