

Comment from Phillip Donovan

The age requirement for tire use is arbitrary and useless for real world friction testing using the standard radial tire because improper tire storage is not adequately addressed. The current standard requires a tire to be less than 1 year old and used within 2 months of being put into service. This standard is fine for agencies conducting testing year round and completing thousands of tests at once. For those of us using the tires for real world PBC testing, it is unlikely we will use a complete tire during testing of a project, and disposing of new or partially used tires due to age is wasteful and contrary to US government environmental goals. According to the requested change to the standard the only change is to how old the tire can be after it is put into use from 2 months to 4 months. This does not solve the problem for those of us using tires sporadically, nor does it take into account how well the storage complies with the standard of keeping them in the dark without ozone and stacked unbundled no more than 8 high at between 60 and 70 deg F. It is very difficult for users to store the tires in this perfect of an environment year round and still meet the age requirement. In addition, the NHTSA points out the most critical flaw in the age requirement, the manufacture does not produce these tires on a regular basis, they "batch" them throughout the year, thus the supply is unpredictable. A more realistic and direct tire tread hardness test should be used to judge if the rubber on a tire is still within the specification for testing. ASTM E1136 specifies a Durometer hardness for the rubber using a "Type A, Shore Durometer that has an 0.5in diameter pressure foot" tested according to ASTM D2240 procedures of 65 +4/-1 (from Table 2 in ASTM E1136). There are of course other specifications in E1136 for elongation, tensile sheet hardness, and rebound, but hardness is the most critical one and the easiest to measure to determine if the rubber has oxidized (aged) too much. An arbitrary age requirement for the tires does not consider improper storage and it would be difficult for any client to definitively determine if the tires have been stored properly before testing. In addition, proper storage should increase the useable life of the tires, thus reducing unnecessary and wasteful disposal of partially used or even unused tires. There needs to be a simple way to determine if the tire tread rubber still meets the hardness requirement and thus can still be used besides a simplistic and arbitrary age requirement.