1. Summary of the Draft Regulation


Section A of this Draft provides the proposed technical building regulations to be observed in order to meet the basic requirements for construction work in Germany.

Point A 3.2 ("Technical requirements in respect of the planning, design and execution of building works and parts thereof pursuant to § 85a(2) MBO1") states that:

"The building requirements on reducing harmful emissions in accommodation areas pursuant to item number A 3.2.1 and A 3.2.2 and to ensure the environmental impact of external building components pursuant to item number A 3.2.3 are set out in the regulations. They must be adhered to. (...)."

One of the regulations listed in number A.3.2.2, concerns "Textile flooring" as set forth by “TRTB (June 2016) - Technical Rule, textile flooring (Annex)".


One provision of this Technical Rule – Textile floorings, presented in Section 1 ("Subject matter and scope"), states:

"Textile floorings with components made of old tyres may not be used in accommodation areas."

First and foremost, the document ignores the entreaty from the Commission, Parliament and Council to move towards a Circular Economy with resource efficiency through recycling and recovery. It ignores the long-term efforts, research and development undertaken by the Community and the Member States, producers, recyclers, recoverers – and others who have worked diligently for more than a quarter century to prepare for a sustainable future.

The provision contradicts the long-term EU goals of Sustainability and the basic precepts of the Circular Economy by establishing barriers to the free movement of goods within the EU.

The terms used in this Draft document are not defined according to accepted practice – limiting the descriptive value of the actions.

The Draft document ignores the roles and importance of REACH, ECHA / CARACAL, ERCA, etc., in accurately defining risk scenarios and the potential impacts on the environment and human health in terms of the materials / applications described herein. It is important to note that at approximately the same time that this Draft was submitted, ECHA received a request to access certain recycled tyre materials in terms of potential risk. The investigation is currently underway – with results anticipated by 2017.

Further, there are numerous errors and omissions in the document regarding acceptable levels of PAH, VOC, etc. and the test procedures proposed in terms of risks to the environment and to human health. A scientific rationale for these decisions is not offered.

Finally, related to the above, the document discriminates ‘old tyres’ exclusively – offering divergent definitions of
terms and criteria to differentiate between the raw material (new tyres), and the materials and products derived exclusively from those raw materials (old tyres) although there are no identified additives or alterations to these outputs.

ETRA, its Board and members recommend that the entire provision be completely deleted without any substitution.

2. Tyre Recycling: Towards the Circular Economy

The move towards sustainability was initiated almost half a century ago during the Stockholm meeting of the United Nations Conference on Environment and Development (UNCED) in June 1972. The meeting signaled a break from the past of 'take, make, consume and dispose' - and the beginning of a new era, with Sustainability as a global focus to meet the needs of today without jeopardising future generations.

A principal goal concentrated on the use of natural resources, including energy, and reducing waste at its source – through considered production and use practices followed by the reuse, recycling and recovery of products at their end of life. Tyres were among the first five waste streams targeted. Subsequently, tyre manufacturers, material recyclers and energy recoverers, equipment producers (among others), have conscientiously worked to meet evolving standards in the original products (raw materials) and in the material outputs (recycled tyre materials).

The EU has worked diligently to improve all phases of product life - from the sourcing of raw materials through production, use, maintenance and, at their end of life, recycling and recovery – and entry into a new economic stream. Each phase has undergone in-depth evaluations and research to determine the environmental, human and social risks, impacts and implications of the materials and energy used. And, it is important to note that research is ongoing – with updates and new investigations as new circumstances evolve.

Since the move towards the more sustainable use of virgin resources and improvement of emissions to air, water and land, tyre recycling has become a sustainable means of providing a broad array of raw materials that enter into the economic stream in substitution of virgin resources – safely as well as economically. The production of recycled tyre materials reduces dependence on energy inputs and virgin resources. Recycled tyre materials are in great demand for crucial industries that are major contributors to the circular economy including sports and leisure, construction, transport, urban development, civil engineering, noise and sound vibration as well as anti-quake products, among many others.

Estimates are that since 1992 almost 75,000,000 tonnes of end-of-life tyres have been defined as waste within the EU, with an increasing percentage being used for material recycling. Since the beginning of the 21st Century, ± 3.2 million tonnes of tyres reach their end-of-life (ELTs) each year, ±650,000 tonnes in Germany, alone.

Through concerted efforts by the EU and Member States, tyres are collected and consigned to the most appropriate means of post-use treatment for the region (proximity principle). Reviews of progress in the development of new technologies, materials, applications and products suggest that on average, approximately one-third of end-of-life tyres have been recycled and have entered into the economic stream as secondary raw materials – or ±25,000,000 tonnes, with a comparable amount used for energy recovery activities.

The material and physical characteristics of the tyre make it suitable for a broad range of recycling applications and products. Briefly, a tyre is an engineering feat. It is basically a large, round, hollow shell filled with compressed air that can support more than 50 times its own weight. Modifications over the years have improved durability, performance and environmental quality, while reducing overall weight. Many ingredients that improve longevity, resistance to abrasion, etc. during on-road life, also contribute to the effectiveness of recycled tyre materials downstream. Further, many of the inherent characteristics of the tyre including retarded bacterial development, resistance to mildew and mold, heat and humidity, sunlight or ultra-violet rays as well as to oils, many solvents, acids and many other chemicals increase its value as a 'raw material'.

The physical characteristics of tyres are also an asset – they are non-toxic, non-bio-degradable, their shape, weight and elasticity make them appropriate for a range of applications in whole, cut, granulated or powdered form. Ongoing research within and outside of the EU has demonstrated that the tyre sector (inclusive of recycling) can boast an annual performance rate of ±90% valuation through reuse, retreading (and export), recycling and energy recovery – with diminishing reliance on landfills – today at a low of ±5%.
Tyre recycling yields three material streams – rubber, steel and textiles – each of which is in demand by architects, engineers, designers and other professionals. The range of applications utilising these materials include, among others, construction works, civil engineering, transport, sports and leisure, sound and vibration abatement programmes. Additionally, these materials are found in a broad array of moulded and fabricated products used in agriculture / animal husbandry, road furniture, automotive products, roofing and flooring underlayments and membranes, concrete additives, among many others.

These applications and products account for the utilisation of more than 1,250,000 tonnes of end-of-life tyre materials – each year. Germany is one of several EU Member States that have been prominent in the development of these materials and applications, including the UK, Spain, Poland, among others, that manufacture a diverse array of high quality products including interior / exterior sound and vibration abatement products. Acoustic panels produced from recycled tyre materials are utilised as structural components and in many constructions. Ongoing evaluations and tests in a variety of exposure scenarios, in laboratories and in the field, indicate that neither the materials used, nor the resulting products pose any risk to the environment or to human health, creating a question regarding the purpose and intent of this Draft.

3. Closing the loop : The Circular Economy Package

The need for and importance of the Circular Economy, envisioned and described in numerous EU communications and legislation – was well-stated in a March 2014 document entitled ‘Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Towards a circular economy : A zero waste programme for Europe /* COM / 2014 / 0398 final / 2*/

‘Valuable materials are leaking from our economies……(which have developed).... a take-make-consume and dispose pattern of growth.. It is increasingly being understood that this threatens the competitiveness of Europe’.

The interdiction described in the Draft Regulation flies in the face of the Circular Economy which has a primary objective of keeping:

‘....the added value in products for as long as possible to eliminate waste. (keeping ) resources within the economy when a product has reached the end of its life, so that they can be productively used again and again and hence create further value….’

The Draft Regulation would result in the blatant elimination of the vast array of materials and products resulting from the recycling of end-of-life tyres, removes classes of secondary raw materials that have been repeatedly demonstrated through ongoing research to be safe to the environment and human health while meeting or exceeding the requirements for use described in rules, regulations and standards.

The EU Circular Economy Package is a culminating phase of the 45 year effort to create a sustainable society within Europe. In discussing the role and importance of the Package, the Commission Website describes the elements, as well as the value of the package as follows :

“The European Commission adopted an ambitious Circular Economy Package, which includes revised legislative proposals on waste to stimulate Europe’s transition towards a circular economy which will boost global competitive-ness, foster sustainable economic growth and generate new jobs. The Circular Economy Package consists of an EU Action Plan for the Circular Economy that establishes a concrete and ambitious programme of action, with measures covering the whole cycle: from production and consumption to waste management and the market for secondary raw materials. The proposed actions will contribute to "closing the loop" of product lifecycles through greater recycling and re-use, and bring benefits for both the environment and the economy.

The German Draft Regulation discussed herein, contradicts the explicit goals of the Circular Economy Package - by the largest economy in the EU. Without a scientific rationale or long-term scientific evidence to support it, the Draft has the potential to stymie broad-based implementation of the Package – particularly for industries and sectors that

1(http://ec.europa.eu/environment/ circular-economy/index_en.htm)
rely upon recycled tyre materials in all forms. For these reasons, the European Tyre Recycling Association, its Board and members recommend that the entire provision on the use of ‘old tyres’, of the Draft Model Administrative Rules Technical Building Regulations [M-VV TB], be completely deleted without any substitution.

4. Conclusions:

In reviewing the Draft document, there are three critical issues that contradict it legitimacy or validity:

First, the document ignores the entreaty of the Commission, Parliament and Council to move towards a Circular Economy with resource efficiency through recycling and recovery. It ignores the long-term efforts, research and development undertaken by the Community and the Member States, producers, recyclers, recoverers and users of the materials produced – as well as others who have worked diligently for more than a quarter century to prepare for a sustainable future.

Second, the document isolates one raw material and product, banning them from use, without a rational basis. In fact, during the past twenty years, more than 100 research investigations have been undertaken in laboratories and in the field, concerning potential health risks from recycled tyre materials, even under the most negative scenarios. The results to date have indicated that these materials do not pose adverse impacts to the environment (air, water, land) or to human health, beyond stipulated norms.

Third, the document disregards the importance and contributions of the tyre recycling sector and its contributions to crucial European industries including construction, automotive, transport, sports and leisure – among others. Tyre recycling utilises a small, but very visible waste stream to produce a broad array of benefits to society and the quality of life. Safer driving, i.e., less skid, blur, rolling resistance, etc., quieter, safer urban transport (trams, trains, etc.), construction insulation in terms of noise and vibration reductions, safe sports surfaces, among many other products and applications.

The Factsheet disseminated by the European Commission says it best:

Recycling is a precondition for a circular economy – resources and materials can be recycled, returned back to the economy and used again. What was once considered as waste can become a valuable resource. To realise the potential of these so called secondary raw materials, we have to remove the existing barriers to their trade, improve the waste management practices and guarantee high quality standards. Only then can industry make full use of secondary raw materials and help ensure their secure supply.

In a circular economy, materials from products at the end of their lifecycle should be recovered through dismantling and recycling. Re-injecting these materials into the beginning of the product lifecycle reduces environmental impact and costs of production. We are proposing a number of tools to encourage and help this process.

The market and the EU single market for recovered and waste materials are still underdeveloped. While 45% of waste material from large companies is resold, this figure falls to only 25% for SMEs. We want to create common standards and market tools to improve this.

The German Draft Regulation discussed herein, contradicts the explicit goals of the Circular Economy Package - by the largest economy in the EU. Without a scientific rationale or long-term scientific evidence to support it, the Draft has the potential to stymie broad-based implementation of the Package – particularly for industries and sectors that rely upon recycled tyre materials in all forms. For these reasons, the European Tyre Recycling Association, its Board and members recommend that the entire provision on the use of ‘old tyres’, of the Draft Model Administrative Rules Technical Building Regulations [M-VV TB], be completely deleted without any substitution.

Proposal:

In order to advance the Circular Economy Package and foster positive impacts on future markets, we would like to take the opportunity to propose to DG Growth that in future, this type of regulation should not be used to ban recycled materials / products, but rather to introduce rules and / or guidelines that illustrate the use of recycled
Valerie L. Shulman  
Secretary General, ETRA

Following is an analysis of the progress in tyre recycling within the expanding EU from 1992 – 2015 (the latest data available)

Valorisation Routes 1992 - 2014