This webinar, organized by the Rubberized Asphalt Committee of EPA’s Scrap Tire Workgroup, will focus on how the use of recycled scrap tires in rubberized asphalt advances sustainable materials management. Join us to hear four experts in the field provide an introduction to the production of rubberized asphalt; present techniques, methods and case studies reflecting new and emerging markets for rubberized asphalt; and describe future trends in the use of rubberized asphalt as a truly sustainable and innovative technology. By participating in this webinar, you will increase your understanding of:

- Why rubberized asphalt is an innovative and sustainable product from a life cycle perspective;
- Ways to successfully use rubberized asphalt products and the advantages of their uses; and
- Current rubberized asphalt technologies as well as future trends in the use of rubberized asphalt products.

**Moderator:**

Michael Blumenthal, Vice President
Rubber Manufacturers Association

Michael was appointed Executive Director of the Rubber Manufacturers Association’s Scrap Tire Management Council in October 1990. Since then, Michael has led the tire manufacturers’ efforts to expand the viable markets for scrap tires, including co-authoring three ASTM standards, and in 2007 was promoted to Vice President of the Rubber Manufacturers Association. Michael is currently working on efforts to create an ASTM standard for playground cover and mulch as well as the effort to update the ASTM standards on rubber-modified asphalt. Michael earned a Master of Business Administration from the City University of New York, a Master of Science from Michigan State, and a Bachelor of Science from Purdue University.

**Presenters:**

“The Use of Scrap Tires in Rubberized Asphalt: A Sustainable Technology”

Michael Blumenthal, Rubber Manufacturers Association

Both the U.S. EPA and the Federal Highway Administration now focus on "Sustainable Material Management" (SMM). This presentation will demonstrate how the use of rubber-modified asphalts can help to achieve the goals...
of SMM by using less toxics and recovering materials by reducing life cycle impacts across the supply chain associated with road construction. The presentation also will discuss an approach to assist decision-makers in achieving balanced choices among environmental, economic and social values – the triple bottom line of sustainability.

“Rubberized Asphalt Technology: An Overview”

Dr. Serji Amirkhanian, International Recycled Rubber Products Initiative (R²P) at the University of Nevada at Las Vegas (UNLV)

This presentation will provide an introduction to rubberized asphalt processes, including the general terminology associated with rubberized asphalt, how it is made, how it is used, the benefits of its use, as well as the various specifications used in many parts of the country. The presentation also will define the historical background of the various asphalt technologies and the advantages and disadvantages of each technology and and/or process. Finally, a brief introduction to the research findings of researchers around the country will be presented.

Dr. Serji Amirkhanian is the Co-Director of the newly created International Recycled Rubber Products Initiative (R²P) at the University of Nevada at Las Vegas (UNLV) and Director of Research and Development of Phoenix Industries, Las Vegas. In addition, he is an Adjunct Professor at Arizona State University (ASU) and UNLV. Dr. Amirkhanian served as the Mays Professor of Transportation and the Director of the Asphalt Rubber Technology Services (ARTS) in the Department of Civil Engineering at Clemson University until June of 2010, before he started his international consulting activities. He has been involved with many laboratory research and field projects related to rubberized asphalt. His research activities have resulted in over 250 refereed journal papers, conference papers, and research reports in addition to over 200 presentations around the country and the world. He is a Technical Advisory Board member of the Rubber Pavement Association and the European Tire Rubber Association (ETRA).

“Traditional Techniques and Methods used in Rubberized Asphalt”

Mark Belshe, Rubber Pavements Association

This presentation will focus on the historical and traditional uses of crumb rubber as an asphalt modifier and as a component in paving applications. There are many ways to successfully introduce recycled tire rubber into paving projects, such as tried and true technologies defined by ASTM D6114 type applications, including equipment and other well-documented methodologies. The attendee to this session will understand the long development history that has advanced the technology to today’s uses as well as an overview of the equipment evolution that had addressed many previous impediments to a quality final product. Examples of successful performance aspects that have identified rubberized asphalt will be presented, primarily the story of the McDonald process and its acceptance and reputation.
Mark Belshe is the Executive Director of the Rubber Pavements Association, a non-profit trade association. Previously Mark was with a large contractor in the southwest United States working on many of the company’s paving projects. Mark is a registered professional civil engineer.

“Developing Trends in Rubberized Asphalt”
Douglas D. Carlson, Liberty Tire Recycling

This presentation covers the current activity within the DOTs and the development of uniform standard specifications. It will also cover emerging innovations in rubberized asphalt technology to include pot hole patching material, plant mix additives, and pre-treated rubber.

Doug Carlson has been in the rubberized asphalt industry actively since 1998. He was with the Rubber Pavements Association for 12 years. He stays engaged with agencies and organizations such as ASTM, AASHTO, State DOTs and FHWA regarding rubberized asphalt specifications. A bulk of his work is in specification development so that agencies can effectively use rubber as a modifier to asphalt. He has been with Liberty Tire Recycling since 2010 and has 4 kids in elementary school in Queen Creek, AZ with his wife, Cindy Atherton of Milwaukee, WI.