



October 20, 2009

Ms. Suzanna Zammataro
Deputy Director General
International Road Federation
2 chemin de Blandonnet
1214 Vernier
Geneva
Switzerland

RE: FOLLOW UP TO IRF ENVIRONMENTAL WORKING GROUP MEETING OF OCTOBER 5, 2009

Dear Suzanna:

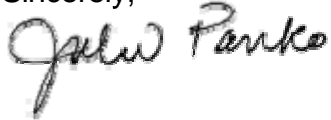
Thank you for inviting me to present the technical work conducted for the Tire Industry Project (TIP) regarding tire wear particles. I enjoyed meeting you and the other group members, as well as learning about the environmental projects of the IRF.

Before departing the meeting, I promised to send you a list of items for which our group could use the assistance of the IRF. Most of these issues need to be addressed in order for us to have confidence that the research we are conducting is representative of most driving/road conditions. Specifically, I would appreciate information regarding:

- Distribution of pavement materials used for road surfaces on each continent (e.g. % concrete, % asphalts, various subtypes as appropriate);
- Chemical composition of various pavements (as detailed as possible);
- Understanding of microsurface texture roughness on each type of pavement. Specifically,
 - How is the microsurface texture roughness measured?
 - What is a typical value for the microsurface texture of a typical road (highway, city and rural)?
 - Are there standards or goals for the microsurface roughness?
 - How does the microsurface texture vary geographically?
- Regional, continental and/or worldwide estimates of pavement wear rates (tons/year)
- Assistance in understanding the proportion of TWP versus pavement particles generated from the pavement/tire interaction. It is necessary to understand this because the TWP samples that we have used for various tests include some amount of free pavement particles which are not embedded in the rubber. This may involve additional tests at one the road simulator laboratories.

I hope that most of these questions can be answered easily within your group given the diversity of the IRF member companies. Please let me know if you have any questions regarding the information I have requested or if I need to provide further clarification.

Sincerely,

A handwritten signature in black ink that reads "Julie M. Panko". The signature is written in a cursive, flowing style.

Julie M. Panko, CIH
Senior Managing Health Scientist