

Meeting of the Technical Pipeline Advisory Committee and the Liquid Pipeline Advisory Committee Feb 25-26, 2014

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OUTLINE

- **PHMSA Proposal for NO Rework in ASTM D2513**
- **Why should rework NOT be allowed in D2513?**
- **What do other countries do?**
- **Recommend supporting PHMSA position on rework**



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AGA PMC

- **For several years, the AGA PMC utility members have been asking for PE gas pipe to be rework free.**
- **The following slides are taken directly from AGA PMC Minutes**



AGA PMC Utility Member Position on the Use of Rework in PE Gas Pipe

- **Rework may not be as clean as virgin resin**
- **Rework may not blend during extrusion as well as virgin pellets because the particles have a non-uniform shape and size.**
- **Rework may retain more moisture after drying than virgin pellets because the particles have a rough surface.**



AGA PMC - Conclusions

- **For all of the above reasons rework may degrade the performance of the pipe with respect to its resistance to slow crack growth, RCP and pinholing, which is especially sensitive to dielectric breakdown by the presence of impurities and non homogeneities in the pipe.**
- **The gas utilities are responsible for the safety and longevity of their distribution system and pay for the cost of repairs. It is the guiding principle of AGA to advocate the safest and long lasting gas pipes that is consistent with economic efficiency.**



ASTM D2513

- **AGA PMC requested that a task group be formed in ASTM to advocate the revision of ASTM D2513 so that no rework shall be used in PE gas pipes.**
- **Perry Sheth of National Grid has initiated a task group in ASTM F17.60 to allow no rework in ASTM D2513.**



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CANADA

- **CSA Z662 (Oil and Gas Code) Clause 12 has requested the no rework be allowed in the gas pipe standard – CSA B137.4, the Canadian PE gas pipe standard that is very similar to ASTM D2513.**
- **A project has been initiated in the CSA B137 TC to remove rework from CSA B137.4.**



FRANCE

- **No rework allowed in PE gas pipe**

Source - Notes from Sarah Patterson, PPI Technical Director, taken at the ISO/TC 138/SC 4 meeting in Norway on October 9, 2013.



NETHERLANDS

- **No rework allowed in PE gas pipe**

Source - Notes from Sarah Patterson, PPI Technical Director, taken at the ISO/TC 138/SC 4 meeting in Norway on October 9, 2013.



BELGIUM

- **No rework allowed in PE gas pipe**

Source - Notes from Sarah Patterson, PPI Technical Director, taken at the ISO/TC 138/SC 4 meeting in Norway on October 9, 2013.



KOREA

- **No rework allowed in PE gas pipe**

Source - Notes from Sarah Patterson, PPI Technical Director, taken at the ISO/TC 138/SC 4 meeting in Norway on October 9, 2013.



UNITED KINGDOM

- **National Grid allows use of rework**
- **For traceability, GIS/PL2-2 specifies use of 100% rework in PE gas pipe**

Source – email from Steve Beech, UK plastic pipe consultant, on 2/18/14.



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New Industry Documents

- A new ASTM standard is being developed regarding proper use of rework
- PPI has updated their Technical Note (TN-30) on rework
- the proposed ASTM standard and the PPI Note are good recommendations for material handling, but the only **GUARANTEE** of eliminating contamination from rework material is to **not allow rework in ASTM D2513.**



PROPOSAL

- **To increase safety and improve overall quality of PE gas pipe, I recommend that we support the PHMSA proposal regarding adoption of ASTM D2513-09, with the exception of Section 4.2**
- **Rework should not be allowed in PE gas pipe, as already required in several other countries**
- **We should also support the ASTM project initiated by Perry Sheth (AGA) to remove rework from ASTM D2513.**



THE END

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