

Risk Assessment Work Group (RAWG)

Update for September Meeting

UKOPA/06/0073

Issues

- Code supplements
- Mechanical damage model
- Ethylene pipelines
- Impact of ground movement on LUP distances

TD/1 and BS8010 Code Supplements

- Harry Hopkins (independent risk consultant) has carried out an independent review of the supplements
- Harry has made some useful comments regarding the structure of the documents and the supplements have been updated to reflect these comments
- Timescale for publishing the documents end of April '07

Mechanical Damage Model

- Concerns that the Advantica implementation of the new UKOPA mechanical damage model over-predicts pipeline failure rates (particularly for smaller diameter thinner wall pipelines)
- PIE have carried out a comparison of different mechanical damage models
 - PIE model – this is a recreation of the British Gas FFREQ model but using more up to date data on damage incidence
 - The Advantica UKOPA limit state model
- The work has concluded that the PIE model provides a better fit to the historical failure data but that the UKOPA limit state model provides a useful research tool and a good basis for further developments of a new model
- Other issues – long term ownership of the failure frequency model needs to be addressed
- Ongoing work currently being undertaken by PRCI and EPRG should resolve a lot of the current uncertainties leading to better models (envisaged timescale 18 months to 3 years),

Ethylene Pipelines

- Issues regarding the Pottery Farm development
- Meeting between the HSE and 3 pipeline operators on the 5th July
- Technical discussion at this meeting focused on failure rates and the use of industry rather than CONCAWE data
- Further meeting planned for October

Impact of ground movement on LUP distances

- Response received from the HSE on the National Grid sponsored ground movement study
- Comments currently being considered by the RAWG

Summary

- Work being progressed through a series of expert meetings with the HSE on specific topics
- Good understanding being developed and progress in most topic areas
- Final(?) WGP meeting being arranged with Gordon Walker in October
- Further meeting currently being arranged with the Moira Wilson (Head of HID CI5) to discuss a number of strategic issues, i.e.:
 - TD/1 and BS8010 supplements
 - Failure frequency modelling
 - Mitigation measures
 - Ethylene pipelines
 - Ground movement
 - Implementation of PADHI to date