

From RAWG/09/015

## **GASOLINE - Notes of a Meeting with HSE and HSL at HSL Offices, Buxton on 9 November 2009**

Present:-

|                |         |
|----------------|---------|
| Peter Harper   | HSE CI5 |
| Shane Turner   | HSL     |
| Zoe Chaplin    | HSL     |
| Deborah Keeley | HSL     |
| Neil Jackson   | UKOPA   |
| Peter Davis    | UKOPA   |
| Mike Acton     | UKOPA   |
| Rod McConnell  | UKOPA   |

### **6 Gasoline**

Though not a specific item on the agenda, this was raised at an appropriate time so that Dr Simon Gant was able to present some initial findings from the CFD work on gasoline vapour dispersion from pipeline sprays, based on his work for Buncefield. He should several simulations of the effects of gasoline evaporation from a spray which could form clouds of flammable vapour both in congested areas of streets and housing and in open areas. He has also simulated lower ground depressions as well as flat earth conditions, and showed distances to half-LFL, LFL and stoichiometric. For typical flows and pressures (97 bar, 150% of normal flow 205 kg/sec) the clouds form after a few minutes depending on wind velocity, up to a distance of about 200m from the pipeline.

Peter Harper explained that HSE must assess the explosion risk from gasoline pipelines following Buncefield, although the low probability may have little effect on LUP zones.

Peter Davis explained the need for pipeline operators to have a clearer idea of how large the LUP zones were likely to be for gasoline pipelines as soon as possible so that they can begin to review what planning processes are currently in progress which could be affected by the PSR changes in 2010.

**Action 5: UKOPA formally requested HSE to give better indications of the size of the expected LUP zones before the end of the public consultation period in January-February 2010. HSE (Peter Harper agreed to convey this request to HSE management.**

#### **HSL Actions from their Action Notes**

14. HSE were requested to provide an indication to UKOPA on the likely size of the LUP zones for gasoline pipelines by February 2010.
15. UKOPA to suggest scenarios to HSE/L for the spray release modelling.