11TH INTERNATIONAL CONFERENCE ON STABILITIY, HANDLING AND USE OF LIQUID FUELS October 18-22, 2009 Prague, Czech Republic

REDUCTION OF TRACE BIO-COMPONENTS IN JET

Air BP / Alisdair Q Clark

Air BP, Sunbury Business Park, Chertsey Road, Sunbury-on-Thames, Middlesex, TW16 7LN UK.

Specifications for jet fuel state that product must be derived from crude oil, or a limited number of other controlled sources, to ensure manufacturing and operational consistency. However, with the introduction of the Renewable Transport Fuels Obligation in Europe, which mandates the use of bio-components in ground fuels, there is now a risk that unspecified components may enter the aviation pool in trace amounts. The most notable of these are Fatty Acid Methyl Esters (FAME), as used for bio-diesel production. Jet and diesel often share ship / pipe-line systems which potentially may result in contact through adherence of material to walls, manifold dead-space and liquid interfaces. It is at these points that trace amounts of bio-component may be adsorbed/mingle with jet. At present a specification of less than 5 parts per million of FAME in jet is set as a control measure. This paper seeks to examine potential points within the distribution network where bio-components might enter jet and discuss methods to mitigate such risks.