

## APPENDIX 3

### *Hydrogen Codes Standards Activities 4th Quarter 2003*

**International Hydrogen Infrastructure Group (IHIG) Codes & Standards (C & S) 10/30/03 Meeting** - Steve Cook of BP presented a first draft C & S Hydrogen Supply Chain Matrix for Europe using the IHIG matrix traffic light approach which highlights gaps in standards development. Steve also presented the first draft at the European Integrated Hydrogen Program (EIHP) September 8th & 9th meeting. It was agreed that the matrix traffic light approach would be the method used for identifying C & S gaps in US, Europe, Japan and the rest of the world. An updated matrix for the US C & S Hydrogen Supply Chain and for the US C & S auto life cycle and new auto life cycle matrices for Europe and Japan were also presented. Jim McGetrick reviewed IHIG C & S working group goals and deliverables, and discussed how the IHIG C & S group would complement the new "FreedomCAR And Fuel Partnership" C & S Tech Team.

**International Codes Council (ICC)** – ICC writes the C & S that are adopted by local US building code and fire officials. As a result of the failure of the September 2003 Nashville hearing to produce affirmative votes on several key hydrogen C & S issues (i.e., canopy storage, retail setback distance, underground storage of liquid hydrogen) there was a special meeting of the ICC Ad Hoc Hydrogen Gas Committee on November 19<sup>th</sup> & 20<sup>th</sup> to formulate positions and supply needed data for the ICC Public Comment hearing deadline in mid January 2004. Jim McGetrick attended the two day meeting in Denver. Sandia National Lab separation setback distance studies were reviewed but were not definitive enough to justify significant changes to current setback distances contained in the International Fire Code, Section 2209, Table 3. The Committee established a Separation Validation Group to interact with the SWRI/Sandia/Miami research team. Comments and background on canopy storage and storage of liquid hydrogen were finalized and these items now have a better chance for approval at the May final hearing.

**FreedomCAR and Fuel Partnership Tech Team** - Maria Curry-Nkansah (Hydrogen Core Team), Mike Flaherty (Bovis), Mike Jones (Hydrogen Core Team), Jim McGetrick (GFT) and Jim Uihlein (GFT) attended the FreedomCAR and Fuel Partnership All Tech Team Meeting in Detroit, Michigan on December 9<sup>th</sup> and 10<sup>th</sup>. BP will be represented on four of the five new Tech Teams: Joint Codes & Standards Team (Jim McGetrick), Fuel/Vehicle Pathway Integration (Angelo Amorelli, Maria Curry-Nkansah), Hydrogen Production (Jim Uihlein), and Hydrogen Delivery (Mike Flaherty, Jim Simnick). Progress on the fifth new Tech Team, the Onboard Hydrogen Storage, will be monitored. Other energy companies participating on the new teams were from Chevron-Texaco, Conoco-Philips, Exxon-Mobil and Shell.

**Michigan Department of Environmental Quality (DEQ) Hazardous Waste & Material Rulemaking** – The state of Michigan's DEQ Hazardous Waste & Material group is starting to develop rulemaking on storage and handling of hydrogen fuel. The first meeting is 1/27 in Lansing. Jim McGetrick will represent the energy companies during the rulemaking.

