

**Eleventh EPSP Meeting – May 14, 2010**  
**Miyoshi Memorial Auditorium - JAMSTEC**  
**Yokohama, Japan**

**Meeting called to order** - The eleventh EPSP meeting was called to order by the chair at 9:10, on May 14, 2010 at the Miyoshi Memorial Auditorium – JAMSTEC, Yokohama, Japan. The chair thanked the panel members, the proponents, and the CDEX staff for their flexibility to prepare for this meeting on an abbreviated schedule in order to accommodate what was thought to be a drilling timeline. The panel was welcomed by Nobu Eguchi, meeting host, presented a brief safety meeting on emergency preparation in case of fire or earthquake. Information on a post-meeting dinner and possible visit to *Chikyu* was also provided.

**Self introduction** - Self introductions were made by all. Present were:

**EPSP members** – Jennifer Henderson, Barry Katz (Chair), Philippe Lapointe, Tadashi Maruyama, Nobuo Morita, Sadao Nagakubo, Yoshifumi Nogi, Donald Potts, Craig Shipp, Jerome Schubert, Dieter Strack, Manabu Tanahashi (Vice-Chair), Toshiki Watanabe, Bill Winters, and Ziqiu Xue

**(EPSP members absent** - Bramley Murton and Catalin Teodoriu)

**Guests** – Takashi Agatsuma, Kam Aoike, Nobu Eguchi, Takuro Eto, Akito Furutani, Colin Graham, Shinya Goto, Daiji Ikenomoto, Issa Kagaya, Toshiro Kaminishi, Junzo Kasahara, Koji Kashihara, Yoshi Kawamura, Yukari Kido, Shomei Kobaysshi, Ken Kubo, Yusuke Kubo, Shigemi Matsuda, Hiroshi Matsuoka, Hunihiro Muta, K. T. Moe, Tam Nawate, Simon Nielse, Kiyooki Oikawa, Jin-Oh Park, Tomo Saruhashi, Ikuo Sawada, Yuichi Shinmoto, Kiyoshi Suyehiro, Ken Takai, Shinji Ueda, Yashuiro Yamada, and Masaoki Yamao

**Agenda review** - The chair noted the unusual nature of the meeting's agenda and that it would largely focus on two proposals, with some limited amount of time set aside for panel housekeeping issues. He noted that the standard reviews presented by the various liaisons would not be included in this meeting's agenda in order to ensure that sufficient time would be available to complete the two primary reviews and that they would return to the agenda when the panel next meets.

**Review Proposal 745-CPP: Coal-Bed Hydrocarbon System and Deep-Biosphere: Geobiology of Deep Carbon Cycles and Implications for CO<sub>2</sub> Sequestration Potentials (Shimokita)** – Yashiro Yamada presented an overview of the proposal. He began by reminding the panel that the proposal was to deepen a preexisting hole drilled during the shakedown cruise (C9001-1A). The drilling of the shallow portion of the site was incident free and that gas hydrates had been encountered. The proposed program is to reenter the hole drill through the cement plug to a depth of 2200 meters, and potentially to a depth of 2500 meters. The target of the program is coal/lignite-bearing sequence of Cretaceous to Eocene age thought to be part of an active hydrocarbon system. The program is to examine hydrocarbon production and consumption in this hydrocarbon system. The coals are associated with a series of sandstone layers. The sandstones are expected to be parts of channel systems and are thought to represent limited geobody volumes. The specific objectives of the proposal are to examine: 1) the coals as a geobiological reactor releasing such compounds as methane and acetate; 2) the conversion and transport of coal-derived products through microbial and diagenetic processes in overlying

strata; and 3) the potential of the coal to serve as a cap rock for CO<sub>2</sub> sequestration. The site was positioned within a basement syncline in an area where shallow hazards were considered minimal. The MITI Sanriku-Oki well located about 70 kilometers from the planned site was the offset well used in the estimation of pore pressure conditions at the planned location. There was no evidence of over-pressure at the MITI well. In the shallow portion of the MITI well a drilling fluid with a density of 1.1g/cm<sup>3</sup> was used. In the deeper section a slightly heavier drilling fluid was used (1.3g/cm<sup>3</sup>). The MITI offset suggested that a low mud weight could be used during drilling of the planned hole and that the mud could be weighted-up as needed. The program would include a series of spot cores, including a suite of “industry” cores to in order obtain better recovery. If drilling was to proceed faster than planned the proponents would consider: 1) increasing the amount of coring at the site; 2) drilling deeper than the proposed 2200 meters; and 3) repeat drilling of the shallow section to increase the number of cores. A discussion on the gas monitoring program and operational contingency plan was presented as a series of flow charts. The panel was reminded that unlike non-riser drilling if hydrocarbons above background are encountered such “shows” or “kicks” would not result in the immediate termination of the hole but would redirect the operations to control possible flow and then proceed to target. Craig Shipp noted that he was a little disappointed that the operation plan did not include PWD and/or MWD/LWD (gamma and resistivity at a minimum). Costs associated with such logging were considered prohibitive and the operator felt that the mud monitoring program was sufficient to assess operational risks while drilling.

It was noted by the chair that this would be the first time that DSDP, ODP, or IODP had intentionally targeted the drilling of a known hydrocarbon system and that the panel was stepping into new territory. The chair tabled further discussion of the Shimokita proposal pending the completion of a figure of composited pore pressure predictions and data from the offset well. During this period the panel acted on several housekeeping needs.

**Discussion on 705-Pre2 – Santa Barbara Basin** – The chair explained that there have been several communications from the proponents and from Gabe Filippelli, SPC Chair, concerning the status and panel plans for the proposal. The proponents wanted to know if an earlier review than June 2011 was possible and the SPC chair wanted to know if the proposal was viable and could potentially be inserted into a drilling schedule. Craig Shipp reported that the proponents hoped that they could receive the same type of industry support that prior drilling in the Gulf of Mexico had received. He reported that conditions were very different (i.e., there was considerable industry interest in the Gulf of Mexico project which is lacking in Santa Barbara project because of drilling restrictions) and that as a result such support is not readily available. Shipp suggested that they look for alternatives, possibly retirees with the necessary experience to assist. It was also noted that Michael Enachescu, who had been the watchdog for the proposal has left the panel. The chair requested a volunteer to take on this task. No one volunteered. Without a new watchdog the chair stated the he would summarize the items that the panel requested and forward this list to the proponents requesting that they complete the “package” and provide it to the panel by an agreed upon date. Panel members would then review the material and make a determination if any additional information is required prior to review. At that time the panel would consider when the review will be scheduled. The chair will also advise the SPC chair and the TAMU Science Operations Manager (Mitch Malone) of the plan and any responses from the proponents.

**EPSP Chair will contact the proponents, the SPC Chair, and TAMU about the way the panel plans to handle the timing and preparation of the next review for 705-Santa Barbara.**

**Approval of prior meeting minutes** - Minutes from the tenth meeting were approved as corrected.

LOUI-8A - Proponents made an error in the coordinates in the proposal addendum, which carried over into their Safety Report. The correct coordinate are 36°56.51'S and 169°46.90'W. Approved depth of penetration for Site LOUI-8A should be 470 meters.

**Pending EPSP activities** - The panel will be asked to complete reviews of the following prior to September 2010:

- Exp. 328 Cascadia CORK APL: Installation of CORK at Site 889/U1327 (8 previous holes already drilled at this location)
- Exp 329 South Pacific Gyre: increase penetration depth at 3 basement sites
- Exp 330 Louisville: 3 new sites

**The chair has requested from TAMU that this material be made available as soon as possible.**

encountered mud weights could be increased significantly without problem. With this information in-hand and an understanding that the operator would adjust the casing plan as necessary if the anticipated pore pressure estimates were too low the panel was prepared to vote. The panel approved the drilling plan in two tranches. The first was to deepen the hole to 2200 meters and the second was to a final depth of 2500 meters, if time permitted.

Site Identification	Latitude	Longitude	Requested Depth of Penetration (m)	Comments
C9001-1A	41°10.5983'N	142°12.0328'E	2500	Recommend approval as requested.

~~The chair asks that CDEX provide a simple summary document containing only the operational and mud gas monitoring workflows.~~ This has been received by the chair.

Site Identification	Latitude	Longitude	Requested Depth of Penetration (m)	Comments
INH-1D	27°47.4538'N	126°53.7979'E	50	NBC hydrothermal mound. Recommend approval as requested.
INH-1C	27°47.4538'N	126°53.7860'E	50	Alternate for INH-1D. Position represents a center point for a circle with a diameter of 40 meters. Recommend approval as requested.
INH-2D	27°47.4981'N	126°53.7851'E	50	NEC hydrothermal mound. Recommend approval as requested.
INH-2C	27°47.4981'N	126°53.7718'E	50	Alternate for INH-2D. Position represents a center point for a circle with a diameter of 40 meters. Recommend approval as requested.
INH-3D	27°47.4044'N	126°53.8026'E	50	SBC hydrothermal mound. Recommend approval as requested.
INH-3C	27°47.4020'N	126°53.7900'E	50	Alternate for INH-3D. Position represents a center point for a circle with a diameter of 40 meters. Recommend approval as requested.

Site Identification	Latitude	Longitude	Requested Depth of Penetration (m)	Comments
INH-4D	27°47.4211'N	126°53.8533'E	100	Local discharge-recharge zone. Recommend approval as requested.
INH-4C	27°47.4553'N	126°53.8525'E	100	Alternate for INH-4D. Position represents a center point for a circle with a diameter of 40 meters. Recommend approval as requested.
INH-5D	27°47.4296'N	126°54.0544'E	200	Local discharge-recharge zone. Recommend approval as requested.
INH-5C	27°47.4539'N	126°54.0421'E	200	Alternate for INH-5D. Position represents a center point for a circle with a diameter of 40 meters. Recommend approval as requested.
INH-11A	27°47.6666'N	126°53.5000	400	Potential fluid path and reservoir. Recommend approval as requested.

EPSP approval still assumes that there are numerous similar features in the region, that the one chosen for drilling is representative of other features in the region, and that it is not unique in the sense of being the largest, the best-developed or an extreme example in some other way.

**Chair was reminded of the prior request that the USIO should arrange, if reasonable, a presentation on dual gradient drilling at an upcoming EPSP meeting.**

The chair thanked Nobu Eguchi for hosting the 11th EPSP panel meeting, the panel members for their quick response to the request by IODP-MI to hold this meeting, and CDEX staff for their preparation for this meeting, and their willingness to work with the panel as they reviewed the first riser program in what is expected to be a hydrocarbon bearing province.

**Meeting adjourned - 4:00**