



Date: February 20, 2002
To: Keir Becker, SCICOM Chair – JOIDES Office
From: George E. Claypool, Chair, JOIDES PPSP
Subject: PPSP Meeting December 3-4, 2001

A Joint meeting of the JOIDES/TAMU Pollution Prevention and Safety Panels was held on 3-4 December 2001 in the Map and Chart room of the Library at RSMAS, Miami Florida.

Members:

(JOIDES):	Claypool, George	Lowell, Jim
	Dañobeitia, Juanjo	MacKenzie, Dave
	DeSilva, Niel	Purdy, Ed
	Francis, Tim	Strack, Dieter
	Flemings, Peter	Suzuki, Uko
	Juvkam-Wold, Hans	Watkins, Joel
	Katz, Barry	Becker, Keir
(TAMU):	Baldauf, Jack	Hovland, Martin
	Burke, Kevin	Thompson, Tom
Guests:	Quoidbach, Dan	Eguchi, Nobu
	Malfait, Bruce	Kinoshita, Jim
	Trehu, Ann (Leg 204)	Morita, Nobuo
	Erbacher, J. (Leg 207)	Tanahashi, Manabu
	Wilson, Doug (Leg 206)	Tate, Bruce
	Janik, Aleksandara	Storms, Mike
	Urquhart, Elspeth	
Apologies:	Ball, Mahlon	Verdier, M. Pierre
	Green, Art	

George Claypool opened the meeting requesting self-introductions and circulating a signature list. Minutes of the last meeting were approved. Meeting host Keir Becker welcomed attendees to Miami and discussed logistics and plans for meals.

Jack Baldauf reviewed drilling results for legs 197-199, and outlined the remaining schedule for Legs 205-210.

Keir Becker reported on the SCICOM meeting in Portland, and reviewed progress on staffing of iPPSP and implications for the future of PPSP.

Doug Wilson described science objectives and proposed sites for Leg 206 (Fast-Spreading Crust). Sites nearby were previously drilled on Leg 138. The objective for Leg 206 is to sample upper oceanic crust, and ultimately to continue coring into the gabbro formed within a midocean ridge magma chamber. The following sites were approved with the understanding that minor site location adjustment may be required as leg planning advances:

LEG 206 Fast-spreading Crust

Site	Latitude	Longitude	Water Depth (m)	Penetration (mbsf)
GUAT03A	6° 40.6'N	91° 55.9'W	3625	1500 (wash to 240 mbsf)
GUAT03B	6° 43.5'N	91° 56.9'W	3650	1500 (wash to 240 mbsf)

Jack Baldauf presented revised drilling plans for Leg 205, Costa Rica convergent margin. A new drilling strategy requires that holes be shifted somewhat from those previously approved at the June 2001 meeting in Tromsø. The following table gives the new site locations and proposed drilling depths:

Table 1. Proposed Leg 205 sites.

Site	longitude W	latitude N	Water depth (m)	shotpoint BGR-99-44	total sediment thickness (m)	target depth (mbsf)	penetration depth (mbsf)	requested wash (mbsf)*
1039R	86° 11.4338'	9° 38.8574'	4375	3210	410	600	900	445
1040R-A	86° 10.6778'	9° 39.7838'	4100	3122	730	450	920	660
1040R-B	86° 10.7438'	9° 39.6980'	4125	3130	660	410	920	660
1040R-C	86° 10.9058'	9° 39.4796'	4250	3150	530	350	920	530
1040R-D	86° 10.9500'	9° 39.8500'	4125	3130	660	410	920	660
1043R	86° 11.1098'	9° 39.2246'	4325	3174	420	190	470	283

*Requested wash depths correspond to the maximum penetration of Leg 170 coring.

The revised Leg 205 site locations were approved as requested except for 1040R-D, for which no seismic line was available for safety review at the meeting. Dan Quoidbach determined that the databank does have a seismic line at the proposed 1040R-D location. PPSP agreed to review this site at the next meeting.

Anne Trehu returned to continue the Leg 204 Hydrate Ridge safety review. The tectonic setting of Hydrate Ridge and locations of nearby exploration test wells were briefly reviewed, along with the status of site approval following the last PPSP meeting. Site-by-site safety review ensued, at sites where increased depth of penetration was requested based on reprocessed seismic records, and for some additional sites not reviewed at the previous meeting. The following are sites approved for coring:

LEG 204 Hydrate Ridge

Site	Line	Trace	latitude	longitude	Water Depth(m)	Pene- tration(mbsf)
HR-3a	230	278	44.586152	-125.148464	882	700
HR-1a	230	465	44.586159	-125.119213	965	350
HR-1b	230	365	44.586056	-125.134881	920	150
HR-1c	230	538	44.588421	-125.107920	980	260
HR-2	300	742	44.57037	-125.075417	1200	620
HR-2alt	300	750	44.57031	-125.074193	1210	620
HR-2altB	230	800	44.586001	-125.066437	1200	650
HR-4a	308	272	44.568605	-125.149480	794	100
HR-4b	300	283	44.570386	-125.147657	780	60
HR-4c	268	268	44.577631	-125.150153	854	240
HR-5a	230	625	44.586096	-125.093815	1035	260
HR-6	283	250	44.574176	-125.152910	850	60

The Leg 204 co-chiefs had previously requested PPSP approval to LWD all sites to approved depths prior to coring, in order to minimize LWD tool rental cost, and to better plan the deployment of pressure sampling devices and other sampling tools during the regular coring program. At the previous Leg 204 safety review it was recommended that site HR-3a be cored first with the standard shipboard hydrocarbon monitoring procedures. If no safety problems were identified by shipboard review, the LWD drilling could commence at the HR-1, HR-2 sites. At this meeting, the proponents proposed that coring be done first at site HR-1a instead of HR-3a, because of the shorter time required to core to the requested depth. In the subsequent discussion, it was pointed out that there are three zones of differing seismic character imaged on line 230. These are (a) an upper zone extending from the sea floor to the BSR, (b) an intermediate zone showing the landward-dipping reflectors that terminate against the BSR, and (c) a deeper seismically disturbed zone. The seismically disturbed zone (c) occurs at a depth of about 300 meters at site HR-1a, and at about 570 meters at site HR-3a. It was the PPSP recommendation that coring should be done first at either site HR-3a or HR-1a. Upon successful completion of the initial coring program without safety problems the LWD program could be conducted at any of the other approved sites, but with the restriction that the LWD holes should not exceed the total depth of the cored site or penetrate a seismic zone that was not evaluated at the cored site.

[Note: It was recommended by the TAMU Safety Panel that Leg 204 site HR-5 be moved to trace/shotpoint 625 to avoid the termination of a bright reflector.]

Jochen Erbacher reviewed the scientific objectives and proposed drilling plans for Leg 207 – Demerara Rise. The following sites were approved:

LEG 207 Demerara Rise

Site	latitude	longitude	Water Depth(m)	Pene- tration(mbsf)
DR-8b	9° 27.23'N	54° 20.52'W	2950	280
DR-5b	9° 18'N	54° 12'W	2340	600
DR-2	9° 5'N	54° 1.0'W	1895	970
DR-3	9° 8'N	54° 58'W	2080	700
DR-1b	9° 57.7'N	54° 7'W	1610	1000
DR-7b	9° 3'N	54° 19'W	1980	600
DR-4b	9° 20.5'N	54° 6.2'W	2800	350
DR-6b	9° 13.6'N	54° 30.1'W	2410	485
DR-6c	9° 7.3'N	54° 35.5'W	2460	485
DR-3c	9° 26'N	54° 44'W	3215	485

The above sites (except DR-4b) were approved with the recommendation that reflector C, the angular unconformity above the synrift sediments, not be penetrated. Site DR-4b appears to be in a location where penetration of reflector C would not pose a potential safety problem.

After conclusion of formal safety reviews, PPSP was asked to discuss issues regarding the iPPSP and to advise the interim Planning Committee on several issues, including:

- The iPPSP mandate prepared by iPC;
- The kind of expertise needed by iPPSP;
- Proposed term limits for iPPSP members;
- Improvements for safety review procedures for riser holes;
- Formation of an informal working group to develop specific recommendations to iPC for a safety review procedure for IODP riser holes;
- PPSP recommendations for iPPSP Chair or Co-chairs.

These issues were taken up for discussion in the order listed above, and PPSP members and guests had the opportunity to provide opinions and recommendations. The minutes below summarize the opinions expressed during that discussion, but these opinions were not formalized as motions voted by PPSP.

Concerning the mandate, there was opinion that the role of PPSP for environmental protection should be emphasized, that safety issues for mission-specific platforms should be mentioned, and that preparing and maintaining a safety manual should be part of the

mandate. After discussion, the expressed consensus recommendation was to incorporate into the iPPSP mandate the need to review sites for mission specific platform drilling, to convey IODP safety recommendations and policy in the form of a written safety manual, and to include a definition of the operators' responsibilities.

Regarding iPPSP membership, there was no opposition to the proposal for a fixed term of service on the safety panel, and a five-year term seemed to be the minimum length considered appropriate for iPPSP membership.

Recommendations for the expertise that should be represented on iPPSP were made both during and following the discussion at the Miami meeting. These recommendations included: Drilling and Petroleum engineering, Marine geophysics, Petroleum geochemistry, Sedimentology (of clastics, carbonates, and evaporites), Structural geology, Gas hydrate and shallow gas seismic expertise, maturation modeling and pore pressure prediction. In addition, it was recommended that iPPSP members include both specialists and generalists with broad knowledge in all of the above areas; and that members have a working knowledge of both reflection seismic and modern downhole logging technology. A recommended candidate for iPPSP was Bob Bruce of BHP Petroleum.

It was felt that iPPSP should adopt safety review procedures similar to those currently used by ODP and the JOIDES/TAMU Safety Panels for riserless coring. In addition, the quality of the safety review process for riserless holes could be improved by more proactive involvement of iPPSP with Leg proponents. PPSP recommends that after Legs are scheduled, an iPPSP member be assigned a watchdog role to help proponents prepare for safety reviews.

Recommendations for safety review procedures for riser drilling are being compiled by a PPSP working group coordinated by Barry Katz, with input from other PPSP members and iPPSP nominees. These recommendations will be delivered to iPC before their next meeting.

PPSP recommends that iPC select the Chair or Co-chairs of iPPSP from among the current JOIDES/TAMU PPSP members who have expressed a willingness to serve in that capacity (Uko Suzuki, Barry Katz, Martin Hovland).

The recommended time and place for the next PPSP meeting is 10-11 June 2002 in Barcelona, hosted by Juanjo Dañobeitia of Centro Mediterráneo de Investigaciones Marinas y Ambientales (CMIMA). Honolulu, Hawaii was selected as a backup location if the Barcelona location is unavailable.