

# Bighorn Basin Coring Project

## Sample, Data, and Obligations Policy

(September, 2011)

### 1. Policy Overview

This document outlines the policy for distributing Bighorn Basin Coring Project (BBCP) samples and data to research scientists (Science Party members and postmoratorium researchers), educators, museums, and outreach institutions and the obligations that recipients of these samples or data incur. This policy was amended from the IODP policy that can be found at <http://www.iodp.org/program-policies/>.

The specific objectives of the policy are to

- Ensure availability of samples and data to BBCP Science Party members so they can fulfill the objectives of the drilling project;
- Encourage scientific analyses over a wide range of research disciplines by providing samples to the scientific community;
- Ensure that dissemination of the scientific findings of all BBCP results so they gain maximum scientific and public exposure;
- Preserve core material as an archive for future description and observations, nondestructive analyses, and sampling;
- Support education and outreach related to the drilling project by providing core materials to educators, museums, and outreach institutions.

There are three categories of policy users: (1) Science Party members, (2) postmoratorium researchers, and (3) educators, museums, and outreach institutions.

### 2. Terms and Definitions

**Science Party** - The Science Party includes all invited BBCP scientists plus other scientists who have been approved by the Chief Scientists for working on expedition material during the moratorium period and publishing their research results.

**Moratorium Period** - The moratorium period is one year long and begins after the conclusion of the sampling party in Bremen which is currently scheduled for January, 2012. During the moratorium period, the only researchers permitted to receive expedition core materials and data are members of the Science Party. After the moratorium, other individuals can request core materials and data but must be approved according to the policy outlined below.

**Sample Allocation Committee** - For the BBCP this committee will be composed of the three Chief Scientists (Clyde, Wing, Gingerich) and the manager of the core repository where the cores are stored (Röhl). Sample requests will be voted on by the SAC and in the event of a tie, another member of the BBCP Science Party that is agreeable to all members of the SAC will be asked to review the request and break the tie.

**Postmoratorium Researchers** - Postmoratorium researchers are researchers who request samples after the moratorium period has ended.

### **3. Policy Guidelines**

#### **3.1. Guidelines for Science Party Members**

##### **3.1.a. Submitting Sample Requests**

Science Party members may submit sample requests to the SAC using the BBCP sample request form (see Appendices). The SAC will review the sample requests, and approval will be based on scientific merit, compatibility with generally accepted sampling protocols, and likelihood of completing the research in a timely fashion.

##### **3.1.b. Data Archiving and Data Access**

The Science Party shall archive and access expedition data online at BBCP password-protected web sites (<http://bbcp.pbworks.com/w/page/38522391/FrontPage>, [http://www.icdp-online.org/front\\_content.php?idcat=1618](http://www.icdp-online.org/front_content.php?idcat=1618), <http://bscw.pangaea.de/>) during the moratorium period. Data or samples will **not** be shared outside of the BBCP Science Party during the moratorium period without prior approval of the SAC. All published data or citable data collections shall be archived at an online open access database like PANGAEA® (<http://www.pangaea.de/>) so that they can be freely and easily accessed by other scientists and the public.

##### **3.1.c. Obligation**

All Science Party members are obligated to conduct research and publish the results of their work. To fulfill the obligation, papers must be published in a peer-reviewed scientific journal or book that publishes in English, or as a peer-reviewed data report. To fulfill the obligation, manuscripts must be submitted within 20 months postmoratorium. Following completion of sample investigations, or in the event that research is discontinued, nondestroyed sample material must be returned a maximum 36 month post sample receipt at the investigator's expense to the core repository where the core materials are stored. If Science Party members are unable to fulfill their obligation, a letter of explanation must be submitted to the SAC explaining why. A request for an extension of the obligation period up to one year can also be sent to the SAC for review. The request will need to justify the reasons for the extension and document the plan for releasing data obtained from BBCP samples within the extension period. Scientists who do not meet their obligations may be restricted from obtaining future samples and data.

##### **3.1.c.i. Submitting Manuscripts during the Moratorium Period**

Science Party members who wish to submit manuscripts or abstracts for publication before the moratorium period has expired must comply with the following guidelines:

- Notify the SAC of their intentions in order to maximize communication between groups and facilitate integration of results.
- Consider adding “BBCP Science Party” as a co-author if it is warranted.
- Acknowledge BBCP using the following wording: “This research used samples and/or data provided by the Bighorn Basin Coring Project (BBCP). Funding for this research was provided by NSF grant 0958821 and \_\_\_\_\_.”
- Provide “Bighorn Basin Coring Project” as a key word to the manuscript publisher

### **3.1.c.ii. Submitting Manuscripts after the Moratorium Period**

Science Party members who submit manuscripts for publication after the moratorium period has expired must comply with the following guidelines:

- Submit manuscripts for publication by 20 months postmoratorium.
- Acknowledge BBCP using the following wording: “This research used samples and/or data provided by the Bighorn Basin Coring Project (BBCP). Funding for this research was provided by NSF grant 0958821 and \_\_\_\_\_.”
- Provide “Bighorn Basin Coring Project” as a key word to the manuscript publisher

## **3.2. Guidelines for Postmoratorium Researchers**

### **3.2.a. Submitting Sample Requests**

Any scientists who wish to conduct research on BBCP core materials may submit sample requests to the SAC after the moratorium period has expired (See Appendices). The SAC will review the sample requests, and approval will be based on scientific merit and compatibility with the generally accepted sampling protocols

### **3.2.b. Data Archiving and Data Access**

All published data or citable data collections shall be archived at an online open access database like PANGAEA® (<http://www.pangaea.de/>) so that they can be freely and easily accessed by other scientists and the public.

### **3.2.c. Obligation**

All postmoratorium researchers are obligated to conduct research and publish the results of their work. To fulfill the obligation, papers must be published in a peer-reviewed scientific journal or book that publishes in English, or as a peer-reviewed data report. To fulfill the obligation, manuscripts must be submitted within 36 months post-sampling. Following completion of sample investigations, or in the event that research is discontinued, nondestroyed sample material must be returned maximum 36 month post sample receipt at the investigator’s expense to the core repository where the core materials are stored. If postmoratorium scientists are unable to fulfill their obligation, a letter of explanation must be submitted to the SAC (< 2 years postmoratorium) or curator (>2 years postmoratorium) explaining why. A request for an extension of the obligation period up to one year can also be sent to the SAC (< 2 years postmoratorium) or curator (>2 years postmoratorium) for review. The request will need to justify the reasons for the extension and document the plan for releasing data obtained from BBCP samples within the extension period. Scientists who do not meet their obligations may be restricted from obtaining future samples and data.

### **3.2.c.i. Submitting Manuscripts based on Postmoratorium Sample Requests**

Postmoratorium researchers must comply with the following guidelines:

- Submit a manuscript for publication within 36 month after receiving samples.
- Acknowledge BBCP using the following wording: “This research used samples and/or data provided by the Bighorn Basin Coring Project (BBCP). Funding for the BBCP was provided by NSF grant 0958821 and \_\_\_\_\_.”

- Provide “Bighorn Basin Coring Project” as a key word to the manuscript publisher

### **3.3. Guidelines for Educators, Museums, and Outreach Institutions**

#### **3.3.a. Submitting Requests**

After the moratorium period has expired, core materials can be used for the following purposes:

- Viewing and describing for teaching and educational purposes,
- Sampling by educators (if materials are abundant, and thus not in demand for research purposes), and
- Public display, such as in museums or at professional meetings.

To request materials, submit a sample request using the BBCP sample request form (< 2 years postmoratorium) or an email (>2 years postmoratorium) to the SAC (see Appendices). Upon receipt, the request/email will be reviewed and the most suitable core materials will be identified. Requestors are responsible for paying for shipping materials to and from their institutions.

#### **3.3.b. Obligations**

Educators, museums, and outreach institutions who receive samples for educational or display purposes incur the following obligations to BBCP:

- All recipients are required to submit a short report at the conclusion of the loan period that documents (a) how the core materials were used, (b) how many students/visitors were impacted, and (c) the activities that were organized related to the loan.
- All public displays of BBCP material must properly credit BBCP using the following wording: “This project used samples and/or data provided by the Bighorn Basin Coring Project (BBCP) which was funded by the National Science Foundation.”

## **Appendix A. Contact Information for Sample Allocation Committee**

### **Chief Scientists:**

Will Clyde  
Dept. Earth Sciences  
University of New Hampshire  
56 College Rd.  
Durham, NH 03824  
Tel: 603-862-3148  
Fax: 603-862-2649  
E-mail: [will.clyde@unh.edu](mailto:will.clyde@unh.edu)

Philip Gingerich  
Museum of Paleontology  
University of Michigan  
Ann Arbor, MI 48109-1079  
Tel.: 734-764-0490  
Fax: 734-936-1380  
E-mail: [gingeric@umich.edu](mailto:gingeric@umich.edu)

Scott Wing  
Dept. Paleobiology  
National Museum of Natural History  
Smithsonian Institution  
PO Box 37012, MRC 121  
Washington, DC 20013-7012  
Tel: 202-633-1361  
Fax: 202-786-2832  
E-mail: [wings@si.edu](mailto:wings@si.edu)

### **Curator:**

Ursula Röhl  
Manager IODP Bremen Core Repository  
Marum  
Leobener Strasse  
28359 Bremen  
Germany  
Tel: +49 421 218 - 65560  
Fax: +49 421 218 - 9865560  
E-Mail: [uroehl@marum.de](mailto:uroehl@marum.de)

## Appendix B. Typical Sample Volumes (from IODP recommendations)

The following volumes are guidelines, not limits:

<b>Sample type</b>	<b>Recommended volume</b>
Thin section	billets 10 cm <sup>3</sup>
Alkenone (Uk 37)	5 cm <sup>3</sup>
X-ray diffraction	5 cm <sup>3</sup>
X-ray fluorescence	20 cm <sup>3</sup> (sediments)
Carbonate	2 cm <sup>3</sup>
Paleomagnetism	7-10cm <sup>3</sup> cubes or minicores
Moisture and density	10-20 cm <sup>3</sup>
Grain size	10-20 cm <sup>3</sup> , depending upon coarseness
Palynology	10-15 cm <sup>3</sup>
Organic samples	20 cm <sup>3</sup>
Inorganic geochemistry	10 cm <sup>3</sup>
Organic geochemistry	10 cm <sup>3</sup>
Sedimentology	10-20 cm <sup>3</sup>
Slabs (for laminae studies)	25-50 cm <sup>3</sup> , depending on slab length
Stable isotopes (C, O)	10-20 cm <sup>3</sup>

## Appendix D. BBCPSAMPLE REQUEST FORM FOR MORATORIUM AND POST-MORATORIUM REQUESTS

### **To be completed by the BBCP Sample Allocation Committee (SAC):**

Sample Allocation Committee, please indicate the fate of this request.

approved                       deferred                       rejected

If this request is rejected, please include a brief explanation that can be quoted to the requestor.

\_\_\_\_\_  
William C. Clyde  
Co-Chief Scientist

\_\_\_\_\_  
Philip D. Gingerich  
Co-Chief Scientist

\_\_\_\_\_  
Scott L. Wing  
Co-Chief Scientist

\_\_\_\_\_  
Ursula Röhl  
Curator

### **To be completed by the Primary Investigator requesting samples:**

1. Primary investigator contact information:

Name:  
Office address:  
Phone:  
Fax:  
E-mail:

2. Please tick one of the following:

Primary investigator is an invited BBCP Scientist    
Primary investigator is a Postmoratorium Researcher or external scientist

3. Are you requesting samples:

Within the moratorium period?    
After the moratorium period?

4. Co-investigator(s) contact information (if applicable):

Name:  
Office address:  
Phone:  
Fax:  
E-mail:

Name:  
Office address:  
Phone:  
Fax:  
E-mail:

Name:  
Office address:  
Phone:  
Fax:  
E-mail:

Name:  
Office address:  
Phone:  
Fax:  
E-mail:

Name:  
Office address:  
Phone:  
Fax:  
E-mail:

Name:  
Office address:  
Phone:  
Fax:  
E-mail:

5. Purpose(s) of request: Please provide a description of the proposed research, including techniques of sample preparation and analysis, roles of individual investigators, etc., (use an attached sheet if necessary). The description of the project will be employed in reviewing the sample request and may be copied to other BBCP scientists.

6. Please describe the proposed core sampling program in detail so that someone other than you could do the sampling if necessary. Also, specify any other information that will be helpful in conducting your sampling program.

Sample Program: Number of samples \_\_\_\_\_ per  core  
pilot study   section  
follow-up   hole

Total number of samples you can analyze within 1 year:

I have funding to undertake the planned analyses/investigation  yes  pending  no

Particular stratigraphic or lithologic units to be sampled:

Sample size (cubic centimeter):

7. Please describe any **specialized** sampling or processing techniques that you plan to use. List any specialized supplies or equipment that you want to use during the sampling. Will you bring these items with you, or do you think they will be available?

8. Please estimate the time it will require for you to obtain publishable results. For samples taken during the first year post-expedition, you must have publishable results ready within the first 18 months.

9. In what condition will the samples be, once your research is complete?

washed                       heated                       destroyed  
 sieved                          demag \_\_\_\_\_ a.f.      other \_\_\_\_\_

10. Samples taken are usually sealed in plastic bags, which are stored and shipped in cardboard boxes at ambient temperatures. If your samples require special storage or shipment handling, please describe how you want the samples handled.

cooled with blue ice   
frozen with blue ice, may thaw a bit  \_\_\_\_\_ hours  
frozen - must remain frozen

11. If your samples will require special storage or shipment (for example, frozen organic samples), please complete the following:

Destination airport:

Who can clear the shipment from customs and provide transportation to final destination?

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_

13. Please indicate your preference for sample delivery (circle one):

(a) we ship your samples to an investigator (please specify name): \_\_\_\_\_,

(b) either yourself or a representative visit the repository to collect your samples,

(c) we give them to you at the end of the Onshore Science Party (moratorium requests only).

**Acceptance of samples implies willingness and responsibility on the part of the Investigator to fulfill certain obligations:**

(a) To abide by BBCP Sample, Data and Obligations Policy.

(b) To return or archive all unused or residual samples, in good condition and with a detailed explanation of any processing they may have experienced, upon termination of the proposed research. **It is understood that failure to honor these obligations will prejudice future applications for samples.**

Approval/disapproval of all requests will be based upon the scientific requirements of the project. In the case of duplicate proposals, BBCP project members will be given priority over non-participating scientists.

Completion of this form in no way implies acceptance of your proposed investigation.

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Signatures of Investigators

Send completed form to:

Dr Ursula Röhl  
Manager IODP Bremen Core Repository  
MARUM  
University of Bremen  
Leobener Strasse  
28359 Bremen  
Germany

Tel: +49 421 218 - 65560  
Fax: +49 421 218 - 9865560  
E-mail: uroehl@marum.de