

Draft Individual Review Form

Proposal number: 2001-F207-1

Short Proposal Title: Contaminant Source Control using PRBs

1a) Are the objectives and hypotheses clearly stated?

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

The objective of using the column experiments to evaluate the use of permeable reactive barriers is clearly stated. The proposal addresses the hypothesis of testing a suitable barrier in an experimental approach to the removal of mercury from ground water at a specific mining location. However, the extent of mercury transport through this ground water system and to receiving bodies of water within the Bay-Delta system is not adequately addressed in the proposal.

1b1) Does the conceptual model clearly explain the underlying basis for the proposed work?

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

A section on the conceptual model of the use of permeable reactive barriers is clearly explained in the proposal. The conceptual model clearly states how permeable reactive barriers might control mercury transport in ground water systems. What is lacking is information on how mercury control using this technology from this or any related types of site might result in a reduction of mercury in the biota of receiving bodies of water.

1b2) Is the approach well designed and appropriate for meeting the objectives of the project?

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

The overall approach of testing the PRB technology is very well stated in the proposal.

1c1) Has the applicant justified the selection of research, pilot or demonstration project, or a full-scale implementation project?

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

The applicant has adequately stated the justification of PRB technology for solving problems with respect to mercury transport in ground water, but has not demonstrated the actual extent of mercury transport via ground water in the study area and how this control technology might lower mercury concentrations in biota downstream of this mine site.

1c2) Is the project likely to generate information that can be used to inform future decision making?

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

The project will likely guide decision making with respect to remediation of one particular mine site, but may not be useful for CALFED decision making.

2a) Are the monitoring and information assessment plans adequate to assess the outcome of the project?

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

The monitoring is adequate to assess the outcome of the column experiments and to determine the effectiveness of the PRB technology at the chosen mine site.

2b) Are data collection, data management, data analysis, and reporting plans well-described, scientifically sound and adequate to meet the proposed objectives?

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

All questions with respect to data collection, management, analysis and reporting are well described and are scientifically sound.

3) Is the proposed work likely to be technically feasible?

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

The proposed work is technically feasible and could be completed in the stated time frame.

4) Is the proposed project team qualified to efficiently and effectively implement the proposed project?

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

The project team has demonstrated capability with regard to the use, understanding, and development of PRB technology.

Miscellaneous comments

[Note: in the electronic version, this will be an expandable field]

See below.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
<input type="checkbox"/> Excellent <input type="checkbox"/> Very Good X <input checked="" type="checkbox"/> X Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	The proposal is technically sound, but may not be applicable to current CALFED needs for mercury management in the Bay-Delta system. In particular, the extent of mercury transport via ground water has not been characterized. Until that is known, this technology has great potential for site remediation, but cannot be considered a high priority for the CALFED program.
