

Panel Scientific and Technical Review

(Note: Review comments will be anonymous, but public.)

Proposal number: 2001-F205

Short Proposal Title: Brake Pads - Reducing Trace Metals

1a) Are the objectives and hypotheses clearly stated?

Summary of Reviewers comments:

One reviewer noted that the claimed hypotheses were actually stated as objectives. The other reviewer found the technical objectives vague, but considered acceptable given the nature of the project.

Panel Summary:

The panel concurs that there is confusion between hypotheses and objectives. More fundamentally, the panel noted that a stated hypothesis is to determine if copper from brake pads is an environmental problem, but the proposal contains no tasks that even remotely address the potential ecological significance of the results.

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

Summary of Reviewers comments:

The proposed adequately describes the events that have led to proposal development.

Panel Summary:

The narrative discussion is adequate, but the figure which is cited as showing the conceptual model for the proposal was not included in the proposal package when submitted.

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

Summary of Reviewers comments:

Both reviewers noted that while the approach of stakeholder involvement is appropriate and well-described, the technical approach to conduct the brake pad wear tests is vague as it will not be developed until after project initiation.

Panel Summary:

The applicants seek funding to hire a consultant to design the technical approach. The panel believes greater effort and thought should have been gone into development of the tests prior to a request for funding.

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

Summary of Reviewers comments:

One reviewer supported characterization of the work as research, although the second reviewer questioned justification for the work

Panel Summary:

The justification for research is not clear. The proposal is essentially a request to fund a stakeholder process to design a brake pad wear test. It is not clear whether these tests will be conducted with the funding or simply designed.

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

Summary of Reviewers comments:

The reviewers differed on whether the information produced would be of significant value if the project were successful

Panel Summary:

The panel expects the project results would be of little value. First, brake pad manufacturers have stated (according to the proposal) that they will reduce the copper content of brake pads if it is shown brake pad copper impairs surface water quality. The proposed work, even if totally successful, will merely demonstrate the presence of copper in brake pads. Secondly, the proposal claims the work is needed because the methods of prior studies have been controversial. There is no indication that the methodological controversies (e.g., particulate vs. dissolved copper, extraction method) would be any less in the proposed effort.

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

Summary of Reviewers comments:

The plans for the brake pad wear tests are inadequate as they will not be developed until after project initiation.

Panel Summary:

The outcome cannot be as assessed as the proposal only seeks to facilitate a stakeholder process.

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

Summary of Reviewers comments:

Same as 2a.

Panel Summary:

The stakeholder process is well-described, but no technical information concerning the brake pad wear test is provided.

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

Summary of Reviewers comments:

The reviewers agree there should be no problem generating brake pad wear debris and measuring its copper content.

Panel Summary:

The panel does not doubt project feasibility, but does question the value of the results.

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

Summary of Reviewers comments:

One reviewer questioned whether the consultant to be hired to design the tests was qualified to do so based upon the included biosketch.

Panel Summary:

The team is well qualified to facilitate the stakeholder process. It is unclear if the consultant is the appropriate person to design the tests.

5) Other comments

One reviewer rated this proposal VERY GOOD while the other characterized it as “unusually poor.”

**Overall Evaluation
PANEL SUMMARY COMMENTS**

The panel believes the stakeholder involvement embodied in the Brake Pad Partnership Project and facilitated by Sustainable Conservation is commendable. While one reviewer finds existence of this process alone to merit a VERY GOOD rating, and accepts later development of the technical methodology, this approach is not acceptable to the other reviewer or to this panel. The proposal is basically seeking funding to design a brake pad wear test, and it is not even clear that the tests will actually be done. Moreover, the results may be no less controversial than the study which preceded this one, and may bring the Brake Pad Partnership Project no closer to resolving whether brake pad copper has adverse environmental impacts. Furthermore, no budget justification is provided, it is not clear why design of a study should take the 2 years requested, and a cost of \$242,000 seems extraordinarily high simply to design the test procedure. Finally, it is noted that brake pad

production of copper and its entry into surface waters via runoff is a national problem for which CALFED, with its regional focus, may be an inappropriate fund source.

On the positive side, this proposal should be commended for recognizing non-point sources and for trying to establish the linkage to surface water.

Summary Rating

Excellent
Very Good
Good
Fair
Poor

Your Rating: POOR