

Charter for the NABIR Field Research Review (FRRP) Panel

Background and Need for the FRRP

The DOE Office of Biological and Environmental Research, within the Office of Science, has established the Natural and Accelerated Bioremediation Research (NABIR) Program to increase the understanding of fundamental biogeochemical processes that will allow the use of bioremediation approaches for cleaning up DOE's legacy waste sites contaminated with metals and radionuclides. Integral components of the NABIR Program are the Field Research Centers (FRCs).

FRCs are expected to be field facilities located on DOE sites that are available for the duration of the NABIR Program. The FRCs will be used for much of the field research sponsored by the NABIR Program, and thereby provide a focus for integrating the field-based program within NABIR. The FRCs and supporting infrastructure are designed to facilitate long-term, interdisciplinary, field research projects and, as needed, provide samples to individual principal investigators (PIs) from the site to conduct laboratory and field studies. FRCs are expected to be available as sites for investigator-initiated research by scientists funded through the NABIR Program.

Due to the large investment that the NABIR Program must make in FRCs and the desire to be able to use FRCs effectively for up to ten years, it will be necessary to carefully review field projects that are being proposed for the FRCs. To accomplish a thorough review of field research at the FRCs the NABIR Program would like all major field research projects to be reviewed by a Field Research Review Panel (FRRP).

Mission and Role of the FRRP

The **mission** of the FRRP is to provide technical reviews to the NABIR FRC Manager that will evaluate FRC activities to determine that:

- 1) the field research activities at the FRC are of the highest quality and produce the least environmental impact, and
- 2) the field sites for research will be useable by NABIR investigators for the duration of the NABIR Program.

To accomplish this mission, the FRRP will evaluate and provide technical reviews on proposed field activities for the FRC that have even a small potential to impact:

- 1) on-going studies,
- 2) regulatory limitations,
- 3) FRC resources, and
- 4) highly desirable future field activities for the FRC.

Because the field activities being proposed for the FRC will be state-of-the-science field experiments with little or no prior field testing, it will be incumbent upon the FRRP to evaluate the implications for the proposed research on the field environment. Issues to evaluate could include, but are not limited, to the following:

- 1) undesirable environmental effects,
- 2) defensible field results,
- 3) adequacy of monitoring and characterization,
- 4) unrealistic regulatory expectations,
- 5) undesirable health and safety risks,
- 6) undesirable long-term effects that might render the site unusable for other studies, and
- 7) unreasonable expectations in terms of FRC resources necessary to conduct the proposed field study.

FRRP Reviews

The scope of FRRP reviews will include all major field research projects proposed at the FRC. Limited field experiments (e.g., sampling-only) that do not impact on-going studies or resources, may be approved by the FRC Manager without FRRP review, if prior concurrence has been obtained from the appropriate DOE Operations Office and the NABIR Field Activities Manager.

The process for reviews by the FRRP will include the following:

- For each major field research activity, one NABIR investigator will serve as the lead and will be the primary point of contact with the FRRP.
- Complete/full work plans will be submitted by the primary point of contact to the FRRP Chair in sufficient time to allow an appropriate level of review by the FRRP.. (Note: Preliminary work plans will be submitted for review to the FRC Manager and, if acceptable, the FRC Manager will request that complete/full work plans be submitted to the FRRP Chair.)
- For major *in situ* experiments, or at the request of the FRC Manager, the primary point of contact will present the work plan at scheduled FRRP meetings and respond to questions on behalf of the proposing team.
- Primary points of contact will be expected to respond to the written recommendations of the FRRP prior to the initiation of field experiments.

Reporting

The FRRP will review major field research proposed for the FRC, form evaluations, and submit written reports for proposed field research activities to the NABIR FRC Center Manager. A copy of the reports will also be provided to the NABIR Field Activities Manager in the DOE Office of Biological and Environmental Research.

Meeting Frequency and Quorum

The FRRP will have scheduled meetings a maximum of 4 times a year at the FRC, fewer would be expected during the first year when fewer projects will be active. Quorum will consist of more than 50% of the active members of the FRRP.

Membership and Terms

The FRRP will be organized and chaired by a scientist from the NABIR Program Support Office at Lawrence Berkeley National Laboratory. The FRRP will consist of the FRC Manager and a mix of hydrologists, geologists, environmental engineers, microbial ecologists, and restoration specialists with field experience. It will be considered highly desirable that members of the FRRP have experience with DOE complex restoration problems. None of the FRRP members may be PIs or co-PIs on NABIR field research projects. None of the FRRP members will have conflicts of interest with the proposed field research projects.

The NABIR Program Support Office will maintain a file with the curriculum vitae of all the FRRP members, and will provide travel support for the FRRP members (except DOE personnel) for all of the meetings. In addition, the NABIR Program Support Office will maintain signed conflict of interest statements from all FRRP members.

The FRRP members are expected to serve for at least one year and preferably two years.

This Charter for the Field Research Review Panel is approved on: _____
Date

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