

Draft FRIB EA Meeting Objectives and Agenda

MEETING OBJECTIVES

The U.S. Department of Energy (DOE) is sponsoring a public meeting and encouraging public involvement in the vicinity of the proposed action that has been evaluated for the construction and operation of the Facility for Rare Isotope Beams (FRIB). The purpose of this meeting is to receive input from the public on the *Draft Environmental Assessment for DOE Funding of the Construction and Operation of the Facility for Rare Isotope Beams, Michigan State University, East Lansing, Michigan* (Draft FRIB EA) prior to finalizing it. At the same time, the meeting provides an opportunity to meet officials from the DOE Office of Science (SC) and Michigan State University (MSU), who are working cooperatively in preparing the EA, as well as other subject matter experts, and view information materials to gain a better understanding of the proposed action and its potential impacts.

The objectives of the Draft FRIB EA public meeting are to:

- continue ongoing public outreach efforts to involve stakeholders in the decision-making process,
- solicit relevant, focused input from stakeholders on the Draft FRIB EA, and,
- ensure that the Final FRIB EA addresses potential impacts on the affected environment.

A court reporter will transcribe the comments provided during the formal comment phase. Comments obtained at this meeting, as well as written comments obtained from other communication mechanisms, will be given equal consideration in finalizing the FRIB EA.

MEETING AGENDA

Open House: 6:30 p.m.

- Register to provide oral comments
- View information materials and meet informally with subject matter experts
- Receive meeting folder

Presentation: 7:00 p.m.

- Welcome and introduction
- Presentation on the FRIB EA
- Clarifying questions and answers

Formal Comment Phase: 8:00 p.m. — 9:30 p.m.

- Participants provide comments
- Concluding remarks

NOTE: Times are approximate and are subject to change based on meeting attendance levels.

OVER→



U.S. DEPARTMENT OF
ENERGY

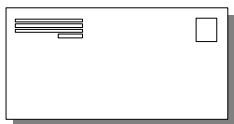
Office of
Science

MICHIGAN STATE
UNIVERSITY

Opportunities for Public Comment

DOE and MSU are fully committed to providing the public access to information about its activities and opportunities for involvement in preparing the FRIB EA. Accordingly, DOE is soliciting written and oral comments on the Draft FRIB EA, which may be view and downloaded and/or requested at: <http://www.frib.msu.edu/NEPA/>.

A variety of methods listed below are available for providing comment. All comments received by close of business **April 16, 2010**, both written and oral, will be equally considered when finalizing FRIB EA. Late comments will be considered to the extent practicable.



FRIB Comments
U.S. Department of Energy (STS)
9800 South Cass Avenue
Argonne, IL 60439



Web site: <http://www.frib.msu.edu/NEPA/>

E-mail: frib.comments@ch.doe.gov



Written comments may be submitted by faxing to our 24-hour toll-free number:
1-888-676-3672



Participants in the public meetings will have access to the following tools to assist them in submitting written and oral comments:

<i>Project Staff:</i>	To answer questions and discuss issues
<i>Comment Forms:</i>	To prepare and submit written comments
<i>Court Reporter:</i>	To record oral comments



Draft Facility for Rare Isotope Beams Environmental Assessment

PURPOSE AND NEED

The U.S. Department of Energy (DOE) has a mission to advance our basic understanding of science. Scientific research at a Facility for Rare Isotope Beams (FRIB) holds the promise to vastly expand our understanding of nuclear astrophysics and nuclear structure. DOE determined that the establishment of the FRIB is a high priority for the future of U.S. nuclear science research. The FRIB establishes a highly sophisticated research laboratory that would produce intense beams of rare isotopes. These beams enable scientists to study the nuclear reactions that power stars and generate the elements found on earth; explore the structure of the nuclei of atoms, which form the core of all matter and the forces that bind them together; test current theories about the fundamental nature of matter; and play a role in developing new nuclear medicines and other societal applications of rare isotopes.

The FRIB concept has undergone numerous studies and assessments within DOE and by independent parties such as the National Research Council of the National Academy of Sciences. These studies—in addition to the joint DOE and National Science Foundation, Nuclear Science Advisory Committee 2007 Long Range Plan—concluded that such a facility is a vital part of the U.S. nuclear science portfolio, complements existing and planned international efforts, and will provide capabilities unmatched elsewhere.

PROPOSED ACTION AND ALTERNATIVES

A Notice of Intent (NOI) was published in the *Federal Register* on October 27, 2009, announcing DOE's intention of preparing an environmental assessment (EA) to evaluate the potential environmental impacts of the proposal to construct and operate the FRIB on approximately 10 acres on the Michigan State University (MSU) campus in East Lansing. Its design is comprised of buildings and/or building additions for a heavy ion/proton accelerator and ancillary laboratories, support facilities such as a cryomodule, and offices. Construction would occur on campus, adjacent to the existing National Superconducting Cyclotron Laboratory (NSCL), which would ultimately be subsumed into FRIB. The function, scope, and licensing of operations of FRIB would be similar to NSCL, but FRIB would have substantially more power.

Most of the structures that would house the accelerator would be thick-walled, reinforced concrete structures. The heavy ion linear accelerator (linac) would be located in a tunnel below grade. A trench (varying between 30 and 75 feet below grade up to 1,800 feet long) would be excavated for the accelerator, necessitating that Bogue Street be closed between Wilson Road and East Shaw Lane two years and portions of East Shaw Lane possibly to be closed for a number of months. The high-energy end of the accelerator would join with the existing NSCL building.

The National Environmental Policy Act (NEPA) requires that Federal agencies consider a range of reasonable alternatives for implementing a proposed action. Taking into consideration the comments received during the scoping phase, the FRIB EA analyzes the following alternatives:

- No action alternative (i.e., maintain current research capability at NSCL and do not proceed with the proposed FRIB). NEPA requires agencies to consider a no action alternative.
- Build and operate the proposed FRIB at MSU. Three configuration options are under consideration: a straight linac, a folded linac with a partial surface facility across Bogue Street from the NSCL, and a compact design with a double-folded linac south of the NSCL.



SUMMARY OF ENVIRONMENTAL IMPACTS

Methods for assessing environmental impacts in the Draft FRIB EA vary for each resource area. For example, air pollutant emissions from construction activities were evaluated for their effect on ambient concentrations and their compliance with ambient standards. Comparison with regulatory standards is a commonly used method for benchmarking environmental impacts, and appropriate comparisons have been made in a number of resource analyses to provide perspective on the magnitude of identified impacts. For waste management, waste generation rates were compared with the capacities or expected capacities of waste management facilities. Impacts in all resource areas were estimated using a consistent set of input variables and computations. Moreover, efforts were made to ensure that calculations in all areas used accepted protocols and current models.

Analysis indicates that with implementation of the design, construction, and operation constraints identified in the EA, there would be no significant adverse impacts on human health and the environment during construction and operation of the FRIB.

Resources Analyzed in This Environmental Assessment

- Land use and visual
- Geology and soils
- Water resources
- Air quality
- Biological resources
- Noise
- Utilities
- Cultural and historical resources
- Public and occupational health and safety
- Waste management
- Transportation
- Socioeconomics and environmental justice

DECISIONS TO BE MADE

Environmental consequences are of great importance to DOE in this endeavor and will be an integral part of the decision-making process. If at any time during preparation of the EA DOE determines that potentially significant environmental impacts might occur with the implementation of the proposed action and that an environmental impact statement (EIS) would be needed, DOE will issue an NOI in the *Federal Register*.

No decisions will be made in the EA itself; however, the decision whether to build the FRIB will be made based on the analyses, as well as public comment. Because the analysis in the EA indicates that the environmental impacts are small, DOE will likely issue a finding of no significant impact (FONSI) unless significant environmental issues are raised during the EA review process.

PUBLIC INVOLVEMENT

DOE is currently soliciting public input on the Draft FRIB EA and holding a public meeting to facilitate public participation. In addition to providing oral comments or submitting written comments at the meeting, the following communication mechanisms are available. All comments, both oral and written, received during the comment period (March 16 through April 16, 2010), will be given equal consideration in finalizing the EA.

U.S. MAIL: FRIB Comments
U.S. Department of Energy (STS)
9800 South Cass Avenue
Argonne, IL 60439

E-MAIL: frib.comments@ch.doe.gov
ONLINE: <http://www.frib.msu.edu/NEPA>
TOLL-FREE FAX: 1-888-676-3672



FRIB, NEPA, and You

The U.S. Department of Energy (DOE) has prepared this fact sheet to encourage and help you to participate in the DOE National Environmental Policy Act (NEPA) process for the Facility for Rare Isotope Beams (FRIB) at Michigan State University (MSU). DOE has determined that it must prepare an environmental assessment (EA) to ascertain whether project construction or operation have the potential to significantly affect the environment. This fact sheet describes the planned NEPA activities, focusing on opportunities for your involvement.

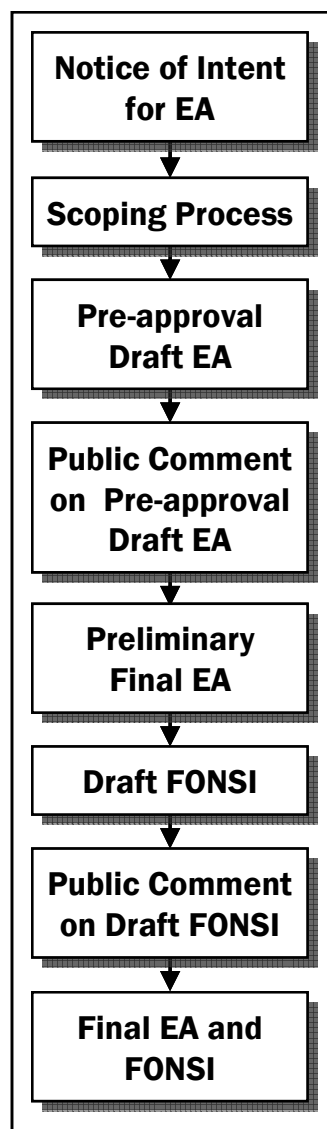
HOW CAN I BE INVOLVED IN THE PREPARATION OF THE FRIB EA?

DOE takes a graded approach in designing public participation processes. The following process was designed specifically with public interest in the FRIB in mind.

- **Notice of Intent (NOI).** On October 27, 2009, DOE published an NOI to prepare an EA in the *Federal Register* and subsequently made announcements in the local media. The NOI states the need for action and provides preliminary information on the EA scope. The NOI serves as the beginning of the scoping process.
- **Scoping Process.** DOE requested your comments on the scope on the FRIB EA regarding such topics as: alternatives to be evaluated and potential environmental impacts that should be analyzed. The FRIB scoping process ended on December 11, 2009. A public meeting was held on November 11, 2009, to also share information and receive comments.
- **Pre-approval Draft EA.** DOE considered the comments received during the scoping period in preparing the draft EA. The draft EA analyzes the potential environmental impacts of the FRIB, and provides for a comparison with project alternatives, one of which is a “no action” alternative.
- ✓ **Public Comment Period on the Draft EA.** DOE sent e-mails and letters to those on its mailing list and issued a public announcement opening a 30-day public comment period. DOE is accepting comments on the draft EA, either in writing or orally at today's public meeting.

TIP: You can request a paper copy of the draft EA at the registration desk or via the project website, where it can also be downloaded: <http://www.frib.msu.edu/nepa>.

- **Preliminary Final EA.** DOE will consider all timely public comments on the draft EA in preparing the final EA. The final EA will address those comments. It is scheduled to be completed this summer.
- **Draft Finding of No Significant Impact (FONSI).** Unless the draft EA reveals the potential for significant environmental impacts, DOE will prepare a draft FONSI, which will discuss the basis for such a finding and describe any commitments for mitigating potential environmental impacts. Such a determination will be made late in the summer. If a FONSI can not be supported, DOE would prepare an environmental impact statement.
- **Public Comment on Draft FONSI.** If a draft FONSI is prepared, DOE will make the appropriate public announcements and open a 30 day public comment period.
- **Final EA and FONSI.** In the absence of new evidence of significant impacts during the public comment period, DOE will finalize the EA and FONSI. At that time, MSU will be authorized to proceed with the FRIB.



NEPA Background

WHAT IS NEPA?

The National Environmental Policy Act (NEPA) is a Federal law that serves as the Nation's basic charter for environmental protection. It requires that all Federal agencies consider the potential environmental impacts of proposed actions which are subject to their control and responsibility and which have the potential to significantly effect the environment. NEPA promotes better agency decision making by ensuring that high quality environmental information is available to agency officials and the public before the agency decides whether and how to undertake a major Federal action. Through the NEPA process, you have an opportunity to learn about government agencies' proposed actions and to provide timely information and comments.

To implement NEPA, all Federal agencies follow procedures issued by the President's Council on Environmental Quality in the Code of Federal Regulations (40 CFR Parts 1500-1508). DOE also follows its own supplementary procedures, found in 10 CFR Part 1021.

HOW DOES NEPA WORK?

Early in its planning process for a proposed action, DOE considers how to comply with the NEPA. The appropriate level of review depends on the significance (i.e., the context and intensity) of the potential environmental impacts associated with the proposed action. There are three levels of NEPA review:

- **Environmental Impact Statement (EIS).** For major Federal actions that may significantly affect the quality of the human environment, NEPA requires preparation of an EIS. An EIS is a detailed analysis of the potential environmental impacts of a proposed action and the range of reasonable alternatives. Public participation is an important part of the EIS process.
- **Environmental Assessment (EA).** When the need for an EIS is unclear, and agency may prepare an EA to determine whether to prepare an EIS or to issue a Finding of No Significant Impact (FONSI). An EA is a brief analysis. DOE's procedures normally provide notification and comment opportunities for host states and tribes only. DOE also may provide notification and comment opportunities for other interested people. DOE then considers any comments received, makes revisions as appropriate, and issues the EA and FONSI. If at any point the preparation of the EA, DOE determines that significant impacts would be likely, an EIS is prepared.
- **Categorical Exclusion.** DOE's NEPA regulations list classes of actions that normally do not require an EIS or an EA because, individually or cumulatively, they do not have the potential for significant environmental impacts. Examples are information gathering activities and property transfers when the use is unchanged.

WHAT KINDS OF POTENTIAL ENVIRONMENTAL IMPACTS DO NEPA DOCUMENTS EXPLORE?

EAs and EISs present coordinated analyses of a broad range of potential environmental impacts, including those to: human health, air, water, soil, biological resources, and historical/cultural resources.

DOE Encourages Public Participation

DOE is committed to open communication and providing public access to pertinent information and opportunities for involvement throughout the NEPA process. Accordingly, DOE encourages your participation because it helps identify issues to be addressed in the FRIB EA.

The comment period ends April 16, 2010. All comments, both oral and written, received by this date will be given equal consideration during the development of the final EA. Comments may be submitted at the public meeting or by:

U.S. MAIL: FRIB Comments
U.S. Department of Energy (STS)
9800 South Cass Avenue
Argonne, IL 60439

E-MAIL: frib.comments@ch.doe.gov
ONLINE: <http://www.frib.msu.edu/NEPA>
TOLL-FREE FAX: 1-888-676-3672

For specific information on the FRIB EA visit <http://www.frib.msu.edu/NEPA/> or contact the NEPA Compliance Officer, Peter Siebach at (630)-252-2007 or peter.siebach@ch.doe.gov. For further information on NEPA visit: <http://www.eh.doe.gov/NEPA>. or <http://ceq.hss.doe.gov/nepa/nepanet.htm>



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