



**Citizens Advisory Board
Idaho National Engineering and Environmental Laboratory**

Alternatives to Incineration Project Plan

The Idaho National Engineering and Environmental Laboratory (INEEL) Citizens Advisory Board (CAB) was asked to review and comment on the INEEL Transuranic Waste Treatment Alternative Selection Project Plan (Draft, dated November 8, 2004). Presentations on the technical and public participation approach for the selection of a technology for treatment of mixed waste were also provided to the Board at its September and November 2004 meetings.

The INEEL CAB has reviewed the document and, in general, found it to be well written. It provides a good explanation of the rationale for the project. The document is somewhat short on technical details, but the CAB expects that additional details will be explained as the project progresses. The CAB commends INEEL for basing the technology selection on the well established nine CERCLA remedy-selection criteria.

The INEEL CAB has recommendations for both the technical evaluation of the alternatives and for the public participation aspects of this decision-making process.

Public Participation

The CAB is concerned about the overall approach to public participation in this decision making process. According to both the draft Public Involvement Plan and the project schedule (page 10), it appears that public involvement will be extremely limited. The briefings and public notifications described reveal that DOE intends to keep the public informed, but does not plan to provide an opportunity for the public to become involved in the decision or even to provide input to the decision.

In light of the experience that DOE has had on this subject in the past, the INEEL CAB believes that DOE should make the selection of a new technology using as transparent a decision-making process as possible. The INEEL CAB suggests that DOE define a more meaningful role for the public in this decision-making process to support selection of a sustainable solution.

Accordingly, the INEEL CAB recommends that DOE define specific public participation objectives and select activities to support achievement of those public participation objectives.

The schedule for involving the public should be crafted to support involvement of the public throughout the technical decision-making process. At a minimum, the CAB recommends that DOE solicit input from the public at key junctures in the decision-making process by providing formal public comment periods and public hearings.

Technical Evaluation of the Alternatives

The CAB understands that DOE intends to evaluate four technologies as alternatives to incineration for the treatment of mixed (hazardous and radioactive) waste, including thermal desorption, steam reforming, the plasma torch, and the direct-current arc melter. The CAB further understands that:

- The initial emphasis will be on thermal desorption
- No further testing is planned for plasma torch and direct current arc melter
- There is a possibility of additional testing to evaluate steam reforming.

The INEEL CAB recommends that DOE compare the four technologies, using an assessment of incineration as a baseline. In addition, we recommend that DOE perform additional testing using representative hazardous and mixed waste, if necessary, to support a full and objective evaluation.