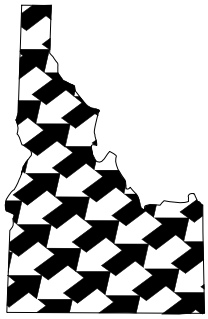

Citizens Advisory Board
Idaho National Engineering and Environmental Laboratory

Deactivation, Decommissioning, and Dismantlement of CPP-603 Basin Project

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The Idaho National Engineering and Environmental Laboratory (INEEL) Citizens Advisory Board supports the idea of deactivation, decommissioning, and dismantlement of the CPP-603 basin project. It needs to be done. We nonetheless have grave concerns about the Draft Environmental Assessment (EA), as follows:

We are not particularly in favor of a strategy that would take eight years to completely evaporate the contents of the basin. That strategy would be problematic in terms of the present plan to grout concurrently as it would pose prolonged risk to workers and likely be more complicated and more expensive than a plan that would take place over a shorter period of time. **The INEEL CAB recommends DOE consider other alternatives that would allow the evaporation process to proceed more quickly.**

The INEEL CAB recommends that DOE develop additional environmental documentation to support evaluation of an option that would involve piping the water from the basin to the Process Water Evaporator (PEWE) at the Idaho Nuclear Technology and Engineering Center for more rapid evaporation, if one very important condition could be met: if the evaporator bottoms from PEWE were not placed in the tank farm, but instead incorporated into and treated along with the sludge. We would not approve any strategy that would add to the volume of waste that must be treated as high-level waste. We understand that the option we are suggesting would likely require installation of new piping and perhaps a new pump to handle the evaporator bottoms, but would like to see the option considered by DOE in its environmental documentation. Disposal of the evaporator bottoms should be incorporated into the decision regarding how to deal with the sludge in the basins.

After reviewing the Draft EA, we had numerous questions regarding the nature of the sludge remaining in the basin. Does it have hazardous constituents? Lead? Transuranic constituents? Does any spent nuclear fuel remain? What is the nanocurie content? The lack of information and the fact that DOE states it does not presently know whether the sludge would meet the waste acceptance criteria for the Radioactive Waste Management Complex (RWMC) leaves us to conclude that the sludge has not yet been adequately characterized. It is impossible for the CAB to compare between grouting and subsequent entombment of the sludge in the basin versus removal and disposal at the RWMC without a better understanding of the regulatory status of the sludge and, more importantly, the risks that may be posed by the sludge from disposal over the aquifer. If the sludge were benign enough to go into the RWMC, for example, why would DOE remove it from the basin in the first place? Would disposal at RWMC versus entombment be more protective of the aquifer? **The INEEL CAB recommends that DOE conduct more extensive characterization of the sludge before making a decision about how it should be managed.**

The INEEL CAB does not understand how DOE does not presently know if all the building materials that would result from dismantlement of Building 603 will or will not fit into the pit. Why hasn't DOE done any calculations to determine if the building materials would fit into the basins? Has a survey been done to determine what portion of the materials is sufficiently contaminated to warrant disposal in the basins?

Has DOE considered the possibility of disposal of non-contaminated portions in another disposal facility? Has DOE identified a landfill facility on the INEEL for disposal of non-contaminated building debris? In addition, the Draft EA presents too little information about the "mound" that might result to allow our consideration of that possible outcome? How would it be stabilized, vegetated, marked, etc? How would be the long-term surveillance and monitoring and long-term stewardship considerations differ between the flat surface possibility and the mounded possibility. **The INEEL CAB recommends that DOE more accurately specify the volume of building materials in order to predict the likely contours of the mound and provide a more thorough analysis of how the mound would be managed under DOE stewardship and later in subsequent environmental documentation.**

Another concern relates to the seismic potential of the basin. We assume that the seismic calculations originally done were much less sophisticated than is currently possible. We are concerned that walls of the basins may collapse once the water is removed especially during an earthquake. We believe DOE needs to recalculate the seismic potential of the basins to demonstrate that grouting would be adequately protective under seismic loading or other upset conditions. The environmental documentation should address seismic risk over the eight year period during which evaporation and grouting would occur and afterwards. In addition, the INEEL CAB recommends that DOE conduct a risk assessment of the entombment option addressing potential risks to human health and safety and the environment under expected and upset conditions to support public consideration of the alternatives.

In the absence of this information regarding 1) character and volume of sludge, 2) volume and contamination extent of building materials that might be placed in the basins, and 3) seismic stability of the basin during and after grouting, it appears unlikely that DOE will be able to reach a defensible Finding of No Significant Impact. In order to support a FONSI, the Final EA would have to provide additional detailed information in the areas that we identified. Even if that information is provided in the Final EA, it will not have been available for timely public review and thus does not support informed public consideration and comparison of the merit of the various alternatives. **The INEEL CAB recommends that DOE issue a revised Draft EA or an Environmental Impact Statement responding to the information needs we have identified.**