

Citizens Advisory Board Idaho National Engineering and Environmental Laboratory

PROPOSED PLAN FOR WASTE AREA GROUP 1 – TEST AREA NORTH

RECOMMENDATION

The following recommendation is submitted to the Department of Energy's Idaho Operations Office (DOE-ID); Region X of the U.S. Environmental Protection Agency; and the State of Idaho as the Idaho National Engineering and Environmental Laboratory (INEEL) Citizens Advisory Board's (CAB) comments on the Proposed Plan for Waste Area Group 1 (WAG 1). The plan was prepared to support compliance with the Comprehensive Environmental Response Compensation, and Liability Act (CERCLA) requirement for public review of cleanup decision making.

The INEEL CAB reviewed a previous version of the Proposed Plan for WAG 1 that was released for public review in the spring of 1998. Consensus was achieved on INEEL CAB Recommendation #40, dated March 18, 1998, which communicated Board concerns about that previous version of the Proposed Plan. Recommendation #40 stated the document was too flawed for public review and recommended that the entire document be done over in order for the public to review it and provide comment on it. DOE-ID took the suggestion to heart and issued a new Proposed Plan some eight months later. Considerable effort was expended in revising the document, including a videoconference with key stakeholders to solicit input on the format of the document.

The new Proposed Plan is a much-improved plan and can support public review as appropriate under CERCLA. It provides a clear review of the results of the Remedial Investigation and Feasibility Study and the risk assessment. The tables allow for comparison among the remedial alternatives; we particularly appreciated the use of shaded columns to highlight the preferred alternatives. The most notable distinction between the two versions of the document, however, is that the revised version presents the arguments in favor of the preferred alternatives for each of the sites at WAG 1 much more clearly than the previous version did. With the exceptions noted below, the INEEL CAB is supportive of DOE-ID's efforts to proceed with cleanup at WAG 1.

The INEEL CAB commends the three agencies for the vast improvements in the Proposed Plan for WAG 1 and recommends that all future proposed plans adopt its enhanced formatting and clarity. We noted with regret that the recently released Proposed Plan for Waste Area Group 3 (WAG 3) would have been measurably enhanced through adoption of an approach to document clarity and formatting similar to that applied to the new Proposed Plan for WAG 1.

The INEEL CAB Board noted that Table 1 presents only two options for presenting the risks posed by contamination to ecological receptors, <1 and >1. The INEEL CAB recommends that future Proposed Plans present actual numbers for calculated hazard indices that exceed 1 as certain values trigger consideration of remedial actions. Indicating only that the risk exceeds 1 does not allow the public to gauge relative hazards from site-to-site or to balance ecological risk against human health risk when commenting on cleanup alternatives.

The INEEL CAB noted during the presentation on the Proposed Plan that there were no operating and maintenance costs included in the total cost estimate for the Soil Contamination Area South of the Turntable (TSF-06, Area B). DOE-ID explained that the costs for operating and maintenance are included in cost estimates for the INEEL Consolidated Disposal Facility (ICDF), which is a preferred alternative being considered in the Proposed Plan for Waste Area Group 3. The CAB objects to this methodology. Cost estimates presented in proposed plans continue to confuse the reader. It is not accurate to suggest that there will be no costs associated with the stewardship of the materials excavated from TSF-06 after they have been disposed. We believe the pro rata share of costs for operating the ICDF should be presented for each waste area group that will contribute to the total volume of wastes to be disposed there. **The INEEL CAB recommends that future proposed plans provide comparable cost estimates for all alternatives and offer full and complete estimates of all related costs.** We are amenable to an explanation that the cost estimate is not "real."

The previous Proposed Plan considered remedial action alternatives at the Disposal Pond (TSF-07) to reduce the risks associated with radium-226. During discussions prior to the issuance of our recommendation on the previous version of the Proposed Plan, INEEL CAB members noted that document's lack of information regarding the level of radium-226 that is naturally-occurring in the vicinity of the Disposal Pond. We questioned the rationale for attempting to conduct cleanup actions to reduce the radium-226 level to a level below background levels in the absence of known background levels. We appreciate the fact that DOE-ID conducted additional investigations to fill the data gap, and we further appreciate the conclusion that the level of radium-226 in the Disposal Pond does not necessitate implementing remedial actions to that particular contaminant.

Table 1 in the Proposed Plan indicates that the contamination in the Disposal Pond poses a hazard index of >1 to ecological receptors. The preferred alternative, limited action, does not address ecological risk, however. We had understood from presentations in the past that ecological risks of >1 do not necessarily warrant remedial action and that at some point, remedial action is required to address ecological risks. **The INEEL CAB recommends that the Record of Decision for WAG 1 describe how the limited action alternative will address ecological risk at the Disposal Pond for the next 100 years.**

The INEEL CAB questions the high costs associated with operating and maintenance for the preferred alternative at the Burn Pits (TSF-03 and WRRT-01) if lead is the only contaminant of concern. In addition, we understood (based on the presentation to the Board) that the capital cost estimate is based on the most expensive possibility that would apply if DOE-ID determines that a 10-foot engineered cover would be required instead of less costly options. It appears that the cost estimates presented in the Proposed Plan portray the cost estimates as if they can be precise, yet the likely actual costs will fall somewhere within a comparatively broader range. The INEEL CAB recommends that DOE-ID present a range of cost estimates if it is not yet possible to present actual estimated costs in future Proposed Plans, when appropriate.

If DOE-ID believes that the cost estimate presented for the native soil cover (\$6 million) is accurate, then the INEEL CAB wonders why the native soil cover was preferred over excavation and on-site disposal. We note that Table 6 indicates that: (1) the "excavation and on-site disposal" alternative would be superior to the "native soil cover alternative" for two of the evaluation criteria (long-term effectiveness and reduction of toxicity, mobility, or volume), (2) the two alternatives are equivalent for the rest of the criteria, and (3) the two alternatives would cost the same. In addition, selection of the "excavation and on-site disposal" would be consistent with the preferred alternative at the Soil Contamination Area South of the Turntable. If the cost estimate for the "native soil cover" alternative is inflated for some reason, the INEEL CAB suggests that it should be estimated more accurately. The INEEL CAB will support selection of the preferred alternative for the Burn Pits only if it would be less costly than the "excavation and on-site disposal" alternative. If the two alternatives will indeed cost the same, the INEEL CAB recommends that DOE-ID reconsider the selection of a remedy for the Burn Pits.

The INEEL CAB noted that the revised Proposed Plan states that the preferred alternative for the Mercury Spill Area (TSF-08) would involve a treatability study for phytoremediation; the original Proposed Plan had called for much more costly excavation. The INEEL CAB previously supported selection of phytoremediation as one of the preferred alternatives for remediation at Argonne National Laboratory - West (ANL-W)¹. We again applaud the selection of a preferred alternative that is both innovative and less costly than the other alternatives; we are hopeful that the treatability study will support phytoremediation. The INEEL CAB recommends communication and coordination with ANL-W to ensure that any lessons learned from that effort are applied to the design and implementation of the treatability study at the Mercury Spill Area.

¹ See INEEL CAB Recommendation #36 addressing the Proposed Plan for Waste Area Group 8, dated January 21, 1998