



Environmental Management Site Specific Advisory Board  
Idaho National Engineering Laboratory

**INEL TEN-YEAR PLAN**

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**INTRODUCTION**

The Environmental Management Site Specific Advisory Board to the Idaho National Engineering Laboratory (EM SSAB-INEL) met with Department of Energy (DOE) personnel regarding the INEL Ten-Year Plan during the July 16-17, 1996 meeting. Board members attended a June video conference and an August stakeholder forum featuring Al Alm, DOE Assistant Secretary for Environmental Management, both of which focused on the EM Ten-Year Plan. The Board developed the following recommendations to DOE-ID on the INEL Ten-Year Plan at the September 17-18, 1996, meeting.

**RECOMMENDATIONS**

While recognizing that all cleanup will not be accomplished in 10 years, the Board endorses the concept of an accelerated 10-year cleanup schedule and recommends that the proposed activities outlined in the INEL Ten-Year Plan receive full funding to bring waste management and cleanup activities to a rapid conclusion. Specific recommendations regarding various facets of the INEL Ten-Year Plan are given below.

Settlement Agreement

The Board agrees that the Settlement Agreement provides strong funding justification for accelerated waste management and cleanup at the INEL. The Board continues to be concerned that a threat to the aquifer comes from the storage of 1.8 million gallons of liquid radioactive waste, containing several million curies of radioactivity. The Settlement Agreement supports an accelerated schedule for conversion of this liquid waste to a more stable form. The Board strongly supports this 50 percent schedule acceleration for liquid waste stabilization, with the completion date moved from 2075 to 2035. The Board also supports the acceleration (from 2018 to 2015) of removal of large quantities of plutonium (i.e., transuranic, or TRU) wastes from over the aquifer and out of the state.

Spent nuclear fuel (SNF), has been stored, handled, processed, managed, and controlled safely and efficiently at the INEL for more than 40 years. Due to concerns of the state's residents and officials, the Agreement states that in 1999, spent nuclear fuel will begin to be converted from wet storage to safer and more dependable dry storage. By 2023, all fuel will be in dry storage and by 2035 -- 25 years earlier than previously scheduled -- all existing SNF will be gone from Idaho to a permanent repository. The Board strongly endorses this improvement.

The Board also endorses the guarantee that none of the 92,000 shipments of commercial nuclear fuel the government must begin accepting next year will ever come to Idaho.

The Board recognizes that there are some concerns:

- The financial penalties are not excessive, and DOE could determine it is easier and more cost-effective to pay the fines rather than adhere to the Agreement.
- The Agreement specifies enforceability by the federal court, which can sentence federal officials to jail and can award financial damages to Idaho if DOE fails to meet the Agreement. However, history shows that the federal courts side with the federal government and there is concern that if milestones are missed, the terms of the Agreement may not be enforced. Also, the Agreement does not collectively address the interests and concerns of other states, such as Nevada and New Mexico, that are candidates for permanent waste disposal. Idaho could become a de facto repository if no permanent disposal site is established.

The Board endorses the Agreement, but cautions that it will only be successful if DOE complies fully with the terms stated. The Board expects and recommends in no uncertain terms that DOE meet each established milestone.

### Integration and Timing

The Board recommends that the Ten-Year Plan realistically define a path forward for cleanup at EM sites and become better integrated at all levels, both site and complex wide, to avoid duplication of activities and facilities. The Board is concerned that the site plans are not adequately incorporated into the national plan based on the current timetable, particularly since the site plans are due to DOE Headquarters the same day the national plan is scheduled to be released to stakeholders. Where specific milestones in the INEL Plan are dependent upon the schedules of other facilities such as the Waste Isolation Pilot Plant and the Yucca Mountain repository, contingency plans should be provided. Where the Oak Ridge plan states that wastes or SNF will be sent to the INEL for “long term storage,” for instance, the Board expects itself and the citizenry of Idaho to be kept fully informed by DOE as to how, or whether, this fits into the SNF EIS and the INEL Ten-Year Plan. Where it is stated that “6,700 kilograms of enriched uranium would be ... shipped offsite” or “treat and ship transuranic and low-level (including mixed wastes) offsite” from Rocky Flats, the Board requires clarification of what “offsite” means to INEL.

### Privatization

The Board recognizes that privatization may be problematic given the complexity of activities and contractual requirements at EM sites. The Board does support privatization where it will reduce costs and eliminate duplication of effort/activities in the governmental system. The Board urges DOE-ID to maintain the appropriate technical knowledge base at INEL as essential support to the privatized activities. The Board recommends DOE-ID examine the potential life-cycle costs and activities associated with privatization and demonstrate the basis for economic benefits prior to moving forward with specific initiatives.

### Waste Minimization and Pollution Prevention

The Board recommends that DOE-ID capitalize on waste minimization at INEL. Waste minimization efforts can and should span the breadth of programs from treatment and disposal of currently existing waste, minimization of current waste streams, and planning for future waste streams that will come from decontamination, decommissioning, and environmental restoration activities. An integrated program of waste minimization and pollution prevention should be developed and explicitly incorporated into the Plan.

### Technology Development and Treatment

The Board has consistently encouraged DOE-ID to continue to develop and improve technologies to complete waste management and environmental remediation tasks more efficiently and cost effectively. The Ten Year Plan must offer a clear rationale for the technologies currently being planned for development. The listing of "INEL Identified Needs Prioritization" contained in Appendix A does not articulate the needs of the Plan to support its accomplishment. For example, "Removal of Undissolved Solids from Tank Waste and Dissolved Calcine" is a mechanical separations issue which has traditionally been resolved by the use of centrifuges. This does not appear to warrant development of a new technology. The Board recommends that the "needs" listing be clearly defined, justified, and prioritized, and realistic budgets and schedules developed promptly.

The Board also recommends that DOE-ID accelerate the treatment of various waste streams to:

1. Stabilize and remove the highest risk liquid waste at an even faster rate than that in the Ten-Year Plan
2. Ensure that waste and spent fuel are in the most stable form possible for future storage, transportation, and/or disposal
3. Optimize the options, schedules, and life-cycle for disposal of all waste streams. DOE should also accelerate evaluation of newer technologies for the possibility of waste minimization and early achievement of final waste forms. An example might be the remaining sodium bearing liquid waste that is legally a mixed transuranic waste and may be eligible for disposal at the Waste Isolation Pilot Plant after stabilization rather than at a high-level waste repository.

The Board applauds DOE for the far-sighted Ten-Year Plan with the accelerated timetable.