

Synopsis of

Answers to Key Questions from the Hanford Advisory Board

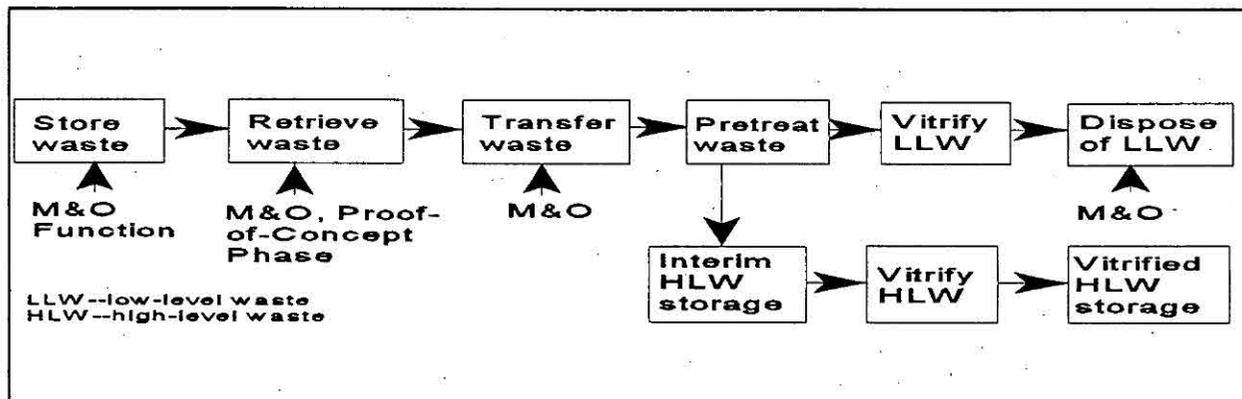
1. What impacts will privatization have on the current program? Is privatization an attempt to stop the TWRS program (retrieve-treat-immobilize tank waste)?

If the U.S. Department of Energy (DOE) decides to proceed with privatization of the Tank Waste Remediation System (TWRS) work at the Hanford Site, it would *not* be an attempt to stop the TWRS Program. DOE believes privatization represents a change in the contracting mechanism by which the TWRS Program can continue and achieve the objectives of the Tri-Party Agreement (TPA).

Below is a schematic outline of the TWRS. The major functions that could be privatized include the waste retrieval function, the waste pretreatment function, the low-level waste vitrification function, the high-level waste vitrification function and the vitrified high-level waste storage function. Responsibilities for the waste storage and waste transfer functions along with the disposal of the low-level waste are expected to remain with the Management and Operations (M&O) contractor.

Vendors with whom the DOE has discussed the potential feasibility of privatizing the TWRS Program indicate that they have the technology to accomplish DOE's mission. If this is reflected in the proposals DOE receives for the Proof-of-Concept Phase and subsequently demonstrated during that phase, DOE could not justify continuing further expenditures on a separate technology development program.

DOE anticipates budget reductions and future limitations on funding. If the decision is made to privatize cleanup of the tanks, functions such as treatment and immobilization would be transferred to the privatization contractors. Therefore, that work would have to be discontinued in the near future. DOE would reallocate those portions of the TWRS budget to a reserve account for the privatization program.



2. Privatization is an attempt to abandon the baseline (Tri-Party Agreement) and the strategy developed around stakeholder values. DOE should develop a strategy which emphasizes efficiencies and maintains the integrity of the TPA.

Privatization is not an attempt to abandon the TPA. It is a proposal that DOE is considering to change the contracting mechanism and increase the likelihood of achieving the TPA objectives. The current TWRS baseline is based on achieving the major objectives of the TPA by using the government's established procurement mechanisms and DOE's traditional approach to project management, i.e., using an M&O contractor. It also reflected the attempt to optimize, in one step, the means and facilities (large, central facilities) needed to process the waste. When fully funded, this approach has been determined to be too costly by many people, oversight organizations, and most significantly by Congress. DOE has already directed that budgets be reduced at all of its sites, including the Hanford Site and the TWRS Program.

Privatization is a means of changing DOE's contracting approach, from among the methods acceptable under federal procurement regulations. The contracting method would change from a government-owned, contractor-operated, cost-plus-award-fee contract to a contractor-owned, contractor-operated, fixed-price requirements contract. DOE recognizes that the TWRS Program is complex, with significant environmental and safety concerns; this will affect the care with which any changes will be made. Contracting for private vendors is not unknown within the federal system; DOE has contracted with vendors at several other sites for remediation services. The challenge of privatizing TWRS is that the contracting change would be made while (1) continuing to meet the deadline in a legally enforceable consent order; and (2) facing site-wide budget cutbacks that will be significant and cause reductions in staff levels through voluntary programs or reduction in force. Significant personnel actions would be associated with the change to privatization.

The major dilemma DOE has faced has been how to introduce efficiencies into the existing contracting approach. The contractors have had significant opportunity to use their own management skills to introduce operating efficiencies, but they have been slow to respond. The *evolutionary* approach of using productivity challenges has not been effective in achieving the results that are required. The change may only be achieved through the more *revolutionary* approach of privatization. Privatization and opportunities to use private sector knowledge and resources to support cleanup as well as to enable some technology transfer was a popular theme of conversation in Hanford Summits I and II.¹ DOE has embraced many of the concepts offered in the Hanford Summit initiatives. DOE is prepared to try this method (privatization) to make the changes it believes are necessary.

¹The Hanford Summits I and II (1994 and 1995) were two public involvement events sponsored by DOE to actively engage stakeholders and the public in discussion of obstacles to progress and specific initiatives for solutions to the obstacles. In Hanford Summit I, DOE made 18 commitments to change. In Hanford Summit II, stakeholders identified 38 specific initiatives for solutions to obstacles which the Secretary of Energy adopted.

3. How will DOE ensure recovery if privatization fails so that the TWRS program will be continued with adequate resources—both technical and staff?

The budget cuts and related staff reductions will cause additional challenges because they are occurring before DOE knows that privatization will work. The situation is made more difficult for the privatization approach because it will also be necessary to reduce the number of technical staff assigned to the TWRS program. The budget cuts would have affected the TWRS staff even without changing to the privatization approach. DOE has determined that the only way to provide funds for the privatization Proof-of-Concept Phase would be to reserve funds from the current TWRS allocation. DOE is planning to retain a nucleus of key TWRS staff who could restart the baseline operation if privatization is not successful. Several other methods may be used as part of the fall-back strategy, including a risk-sharing/cost-sharing agreement with the vendor, implementing phased funding and progress, and regular examination of technical results as input to the go/no-go decision for the Full-Scale Production Phase.

4. What agency would have regulatory oversight? NRC? OSHA? How would oversight responsibilities be transitioned? How will health, safety, and the environment be safeguarded under privatization versus as laid out under the TPA?

Environmental compliance is already regulated by external agencies. DOE has been self-regulating health and safety for TWRS activities under the TPA baseline because DOE has had the authority, framework, and responsibility to do so. Under the privatization, regulatory oversight would be provided by a variety of agencies.

- For environmental protection and compliance, the oversight will be provided by Washington state organizations such as the Department of Ecology (Ecology) and the Department of Health. This is not a change from the TPA baseline approach.
- For conventional industrial and occupational safety oversight, that responsibility will go to the Occupational Safety and Health Administration (OSHA) and the Washington Industrial Safety and Health Agency (WISHA). This is a change from the TPA baseline approach where DOE, as the owner, was responsible for the industrial/occupational safety oversight.
- Radiological safety oversight will be provided by DOE for the Proof-of-Concept Phase; this time will provide the opportunity for the Nuclear Regulatory Commission (NRC) to stabilize its changing regulatory requirements to allow for them to take on this responsibility during the subsequent Full-Scale Production Phase.

DOE self-regulation was the TPA baseline approach because DOE owns the TWRS facilities and has the responsibility and authority under the Atomic Energy Act. The situation during the Proof-of-Concept phase would be different; DOE would be providing oversight for a contractor-owned, contractor-operated facility. Utilizing the NRC during the Full-Scale Production Phase would be a change from the TPA baseline approach.

5. How will schedule requirements (TPA milestones timeline) be met?

If the current contracting mechanism involving an M&O contractor is not changed and the baseline program is pursued with significantly lower funding, the milestones of the TPA will not be met. Even with the change to privatization as the contracting mechanism, the near-term interim TPA milestones will not be achieved. However, DOE believes it can still meet the major TWRS milestones in the TPA using the privatization approach if it is successfully funded by Congress (after DOE demonstrates that privatization can achieve real cleanup). DOE's determination that privatization was feasible was made after the conclusion that this new method would enable DOE to fulfill the nine critical TPA milestones. Below is a listing of those milestones.

Milestone Description	Date
Start hot operation of LLW pretreatment facility	12/31/04
Initiate hot operation of LLW vitrification facility	6/30/05
Start hot operation of HLW pretreatment facility	6/30/08
Initiate hot operation of HLW vitrification facility	12/31/09
Retrieve waste from all single-shell tanks	9/30/18
Complete closure of single-shell tank farms	9/30/24
Complete pretreatment of Hanford tank waste	12/31/28
Complete vitrification of HLW	12/31/28
Complete vitrification of LLW	12/31/28

6. Define the scope of privatization.

The term "privatization" is often used indiscriminately and inaccurately, so its bounds are not always clear. The general definition of privatization is: a shift of functions from a governmental agency to the private sector. On the next page are two definitions of the term privatization; the first is the classic definition and the second is the one as it applies to the TWRS. The major functions likely to be privatized are described in the answer to question 1.

Classic definition of privatization:

The government, which runs a major service operation that services large client populations, sells the operation to a private sector organization so they can provide this service. The government allows the market forces to define the price, nature, and quality of the service.

TWRS definition of privatization:

The U.S. Department of Energy, the single client for the service, retains the responsibility for getting the service provided, but does it under contract with the private sector organization. The private sector organization builds all the facilities with its own financial resources and recovers its costs based on the fee charged for the products that meet the specifications defined by DOE. The price paid for products would be determined by competition among proposers.

7. Why are we choosing the largest site item to privatize?

DOE is considering privatization of the TWRS because of an initiative from the private sector and subsequent TPA action. DOE was approached by a private company, the Environmental Corporation of America (ECA), in the summer of 1993, with an outline for an approach to privatizing the high-level waste vitrification plant. ECA's concept was that it would design and build the facility, process highly radioactive and hazardous waste with its own money, and be prepared to fulfill the requirements of the Federal Facility Agreement and Consent Order (TPA). When the TPA was renegotiated in 1993, one of the milestones added requires DOE to review the concept of privatization. Because of ECA's initiative, DOE was motivated to look at the feasibility of whether privatization could be applied to the entire Tank Waste Remediation System.

Since 1993, other forces have affected the issue of privatization. Vice President Gore, in the effort to Reinvent Government, has promoted the concept of privatization. DOE appointed its own Contracting Reform Initiative Task Force, which recommended the "make versus buy" decision and noted the importance of contracting for specific services and products. The Congress is strongly interested in privatization and is considering legislation to facilitate this approach (see the following letter from Washington State's Sen. Slade Gorton and the Hanford area's Rep. "Doc" Hastings).

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Honorable Hazel O'Leary
Secretary
Department of Energy
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Dear Madam Secretary,

The members of the Washington State delegation are writing to encourage the Department to expedite the bid process to vitrify high-level nuclear waste on the Hanford reservation.

In the past, we have contacted you and your staff to express our serious interest in the stabilization and cost-effective vitrification of hazardous tank waste at the Hanford site.

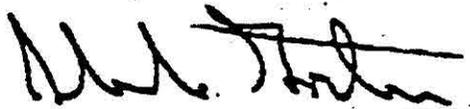
We are impressed by proposals to privatize the waste cleanup effort. This would shift risks to contractors, while vastly reducing capital outlay requirements on the already besieged DoE budget.

Previous Department communications indicated that a formal Request for Proposal would be forthcoming by January 1995. To date, the Department still has not issued a RFP, and the announcement issued in Washington state last month indicates a further delay in this schedule.

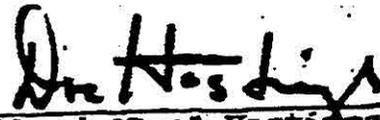
We recognize the enormity of the task before DoE. However, the time has come to move forward on privatization proposals which employ proven technology and private capital. We request that you issue the RFP within 30 days or provide a written explanation for the delay.

Thank you for your prompt assistance. We look forward to working with you.

Sincerely,



Slade Gorton
United States Senator



Richard "Doc" Hastings
Member of Congress

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8. DOE does not have the authority to enter into a "long-term" contract; i.e., at this time, DOE has authority to engage in 3-year contracts.

DOE currently has significant flexibility in terms of the length of the contracts into which it enters. No additional legislation would be needed for the Proof-of-Concept Phase because DOE can enter into contracts for up to 10 years in length with renewal options up to five years in length, as provided in the Atomic Energy Act (Section 161 (u)(2)). DOE is authorized to enter into multi-year contracts for up to 10 years for building a facility and the goods and services it provides, excluding renewal options, and renewal options of five years at a time for the delivery of goods and services. The longer the contracting period is, the more certainty (and less risk) potential contractors will perceive in bidding. A lower risk translates into potentially more bidders and a lower cost for DOE.

In addition, two other initiatives (as noted on page 5) are linked to this question.

- DOE is conducting a Contract Reform Initiative and that task force has already recommended that *all* activities should be assessed for the feasibility to out-source them. This initiative is also expected to recommend ways to speed up the contracting process.
- Sen. Slade Gorton and Rep. Richard (Doc) Hastings are aggressively supporting privatization efforts at Hanford. They are submitting legislation in this session of Congress to give the Secretary of Energy the authority to commit to longer-term contracts, up to 30 years.

9. Can standards and performance specifications be effectively specified?

Specifications for the waste products to be purchased can be effectively specified. During the Proof-of-Concept phase, DOE expects to receive several products from the processing of the waste. Specifications for these products will have to be developed. The products expected are:

- Low-activity waste in vitrified or other solid form (e.g., a ceramic product)
- Fission products which have been removed (as liquid or in ion-exchange media)
- Sludges removed from the waste stream.

Only the low-activity waste is considered a final form product. The specification for this material is under development and will be completed in the near future.

Other products are created during the processing of the waste. Specifications for these will be prepared; however, they do not carry with them the same critical character as the specifications for the low-activity waste.

The broad basis for determining the suitability of the radioactive waste form for disposal are the NRC requirements for low-level waste disposal (10CFR61) and the requirements presented by the RCRA land-ban disposal restrictions of both the EPA (40CFR268) and Ecology (WAC 173-303-140). The evolving EPA regulations (40CFR193) on groundwater protection which define the requirements for long-term disposal performance are also a significant factor affecting specifications for the waste form. The large radionuclide inventory associated with the TWRS low activity waste disposal (2 - 3 million curies) makes compliance with these regulations crucial for the protection of the environment.

10. How will privatization reduce overall cost?

Privatization is expected to reduce costs by having a head-to-head competition between vendors who have invested their own money in an operation. At this time, it is impossible to know precisely the economics of a facility operated by the private sector. Numerous factors will affect the price charged by the vendors to produce the solidified waste and these factors will vary with the situation. Some of the factors are:

- Cost of money
- Time to complete the job
- Productivity of staff
- Operational reliability of the plant
- Uncertainty of the waste feed characteristics, and
- Risk.

There is strong evidence that a company which invests over a billion dollars in a plant (in the Full-Scale Production Phase(s)) and signs a contract to deliver a product intends to and will have to compete to get the feedstock (i.e., the waste to be treated) necessary to operate the plant. By requiring excess capacity for each plant, DOE will be able to shift production balance from a minimal 50/50 split to a 40/60 split of the market share. In other words, DOE can reward a vendor for exceptional production and cost effectiveness by giving it more waste. If competition lags and with the capacity available, it would be possible to give the entire supply of waste (covering several years of production) to one vendor. This technique can motivate vendors to meet or exceed production goals because it represents a significant impact on a company's cash flow. Competition could also be maintained through periodically "auctioning" tanks. This atmosphere of competition is expected to reduce overall costs.

DOE has yet to examine the additional means by which competition can be stimulated in this complex and restricted market. Experience in the Defense Department indicates that when two vendors compete head-to-head on a limited production run for weapons systems, competition is maintained and costs are reduced. Cost savings are being experienced at other DOE sites with privatization projects, although they are on a smaller scale.

11. Is capital available?

Capital would be available, according to Smith Barney, a Wall Street financial assessment and investment firm that reviewed the TWRS privatization concept. Smith Barney noted that vendors should be able to secure money to support privatization of the TWRS program when DOE establishes a stable business framework, a defined regulatory situation, and a set of defined, understandable and manageable risks.

12. Is it technically feasible? How will DOE ensure a consistent, acceptable product?

It is technically feasible to produce the low-activity waste product, e.g., a solidified form such as glass or ceramic. Laboratory tests and pilot tests have been conducted to verify feasibility. The consistency of the product is covered in several ways.

- First, DOE must be prudent with regard to the delivery of the waste to be treated. Care by DOE in selecting the sequence of tanks will be important to the consistency of the product.

- Second, the vendor must meet waste specifications provided by DOE. If the product meets the specifications, DOE would accept it; if the waste does not meet specifications, DOE will return it to the vendor for corrective action to resolve the discrepancy.
- Third, a test method will be used to determine if the products meet the specifications.
- Fourth, the vendor will have to provide quality control records when the product is delivered.

These features should provide reasonable confidence that a consistent product will be achievable.

13. How will D&D/closure be accounted for?

"Decontamination and decommissioning" (D&D) and "closure" are terms used as synonyms for cleanup. "D&D" relates to nuclear regulations, and "closure" relates to environmental regulations.

The potential vendor must commit to D&D the facility as a basis for obtaining a contract with DOE. The cost of this D&D would be included as part of the product price. If the facility is to be licensed by the NRC (e.g., Full-Scale Production Phase), the NRC will not issue the license for the vendor to begin processing waste unless the vendor has provided firm assurances that facility will be cleansed of any residual radioactivity after the work is completed. If NRC cannot get the appropriate levels of assurance from the vendor, NRC will not license the facility.

Since the treatment facilities would be permitted under RCRA (Resource Conservation and Recovery Act), an implementable closure plan would be required as a condition of obtaining a permit. The vendors would be made responsible for facility closure to provide the appropriate motivation for designing and operating the facilities so that closure is cost-effective.

14. Who are the members of the ESAAB (the Energy Systems Acquisition Advisory Board)?

This board was created by the Secretary of Energy, and is chaired by Secretary O'Leary. The board's responsibility is to formally review major DOE acquisitions being considered by DOE and make recommendations to the Secretary. Membership includes:

1. Secretary, Department of Energy, who serves as Chair
2. Under Secretary, who serves as the Acquisition Executive
3. Assistant Secretary for Environment, Safety and Health
4. General Counsel
5. Chief Financial Officer
6. Assistant Secretary for Human Resources and Administration
7. Deputy Assistant Secretary for Procurement and Assistance Management
8. Director of the Office of Economic Impact and Diversity
9. Assistant Secretary for Policy, Planning, and Program Evaluation.

Privatization is currently being reviewed by the ESAAB because other major acquisitions for the TWRS Program (related to TPA milestones) are scheduled for review, and choices must be

made. If privatization is to occur, any other conflicting or unnecessary acquisitions would have to be canceled.

15. Who is the Ahearn Committee?

Currently, DOE is attempting to eliminate the self-regulatory oversight ability. This issue is being studied now by the Federal Advisory Committee on External Regulation of Department of Energy Nuclear Safety. It is chaired by Dr. John F. Ahearn, Executive Director of The Scientific Research Society, and Gerard F. Scannell, President, National Safety Council. The committee is diverse, made up of members drawn from federal and state governments and the private sector, chosen for their policy, environment, safety and health backgrounds, and balanced to represent different public, federal, state, tribal and industry views and experiences. Utilizing the information from this committee, a formal DOE position will be made sometime in the future. (See the attached fact sheet).