October 12, 1990

The Honorable James D. Watkins  
Secretary of Energy  
Washington, DC 20585

Dear Mr. Secretary:

On October 11, 1990, the Defense Nuclear Facilities Safety Board, in accordance with Section 312(5) of the Atomic Energy Act of 1954, as amended, 42 U.S.C.A. Section 2286a(5), approved a recommendation which is enclosed for your consideration.

42 U.S.C.A. Section 2286d(a) requires the Board, after receipt by you, to promptly make this recommendation available to the public in the Department of Energy's regional public reading rooms. Please arrange to have this recommendation placed on file in your regional public reading rooms as soon as possible.

The Board will publish this recommendation in the Federal Register.

It is to be noted that the enclosed recommendation applies to the Department of Energy's proposed implementation of the Board's Recommendation 90-3 dated March 27, 1990.

Sincerely,

John T. Conway  
Chairman

Enclosure
Dated: October 11, 1990

On March 27, 1990, the Board transmitted to you its Recommendation 90-3, regarding the single shell high level waste tanks at the Hanford site. On May 10, 1990, you replied stating that you agreed with our recommendations and accepted them. On August 10, 1990, you forwarded to the Board your plan for implementation of the Board's recommendations on this issue.

In the intervening time, members of the Board and their staff and technical experts have visited the Hanford site on several more occasions and have further discussed the measures proposed and the plans for implementation. After careful consideration, the Board has concluded that the DOE proposed implementation plan for Recommendation 90-3 is not adequately responsive. In particular, it does not reflect the urgency that the circumstances merit and that was implicit in the Board's recommendations. Nor does it appear that the contractor involved has been required by DOE to marshall the technical and managerial resources required, and to focus them on the problem in a measure commensurate with its gravity.

The Board specifically recommends that the implementation plan be modified as follows:

0 Immediate steps should be taken to add instrumentation as necessary to the single shell tanks containing ferrocyanide that will establish whether hot spots exist or may develop in the future in the stored waste. The instrumentation should include as a minimum additional thermocouple trees. Trees should be introduced at several radial locations in all tanks containing substantial amounts of ferrocyanide, to measure the temperature as a function of elevation at these radii. The use of infra-red techniques to survey the surface of waste in tanks should continue to be investigated as a priority matter, and on the assumption that this method will be found valuable, monitors based on it should be installed now in the ferrocyanide bearing tanks.

0 The temperature sensors referred to above should have continuous recorded readouts and alarms that would signal at a permanently manned location any abnormally high temperatures and any failed temperature instrumentation.

0 Instrumentation should also be installed to monitor the composition of cover gas in the tanks, to establish if flammable gas is present.
The program of sampling the contents of these tanks should be greatly accelerated. The proposed schedule whereby analysis of two core samples from each single shell tank is to be completed by September, 1998 is seriously inadequate in light of the uncertainties as to safety of these tanks. Furthermore, additional samples are required at several radii and at a range of elevations for the tanks containing substantial amounts of ferrocyanide.

The schedule for the program on study of the chemical properties and explosive behavior of the waste in these tanks is indefinite and does not reflect the urgent need for a comprehensive and definitive assessment of the probability of a violent chemical reaction. The study should be extended to other metallic compounds of ferrocyanide that are known or believed to be present in the tanks, so that conclusions can be generalized as to the range of temperature and other properties needed for a rapid chemical reaction with sodium nitrate.

The Board had recommended "that an action plan be developed for the measures to be taken to neutralize the conditions that may be signaled by alarms." Two types of measures are implied: actions to respond to unexpected degradation of a tank or its contents, and actions to be taken if an explosion were to occur. Your implementation plan stated that "the current contingency plans ....... will be reviewed and revised if needed." We do not consider that this proposed implementation of the Board's recommendation is adequately responsive. It is recommended that a written action plan founded on demonstrated principles be prepared as soon as possible, that would respond to indications of onset of abnormal temperatures or other unusual conditions in a ferrocyanide-bearing tank, to counter any perceived growth in hazard. A separate emergency plan should be formulated and instituted, covering measures that would be taken in event of an explosion or other event leading to an airborne release of radioactive material from the tanks, and that would protect personnel both on and off the Hanford site. The Board believes that even though it is considered that the probability is small that such an event will occur, prudence dictates that steps be taken at this time to prepare the means to mitigate the unacceptable results that could ensue.
Facility within the continental United States, at five potential sites:

1. Badger Army Ammunition Plant (BAAP) Site, Wisconsin. The Badger site is located in south-central Wisconsin, in Sauk County.
2. Bonneville Power Administration Hanford Reservation Site, Washington. This site is near the center of the Department of Energy's Hanford Reservation in southeastern Washington State.
3. White Sands Missile Range (WSMR) Site, New Mexico. This site is located near the southeast corner of the WSMR in south-central New Mexico.
4. Orogrande Site, New Mexico. This site is located about three miles north of Orogrande in south-central New Mexico. It is close to the White Sands site.
5. Texas Utilities Electric Site, Monahans, Texas. This site is located in Ward County approximately 8 miles northwest of Monahans and 65 miles west of Midland. In September 1989, evaluation of these five alternative sites, the Defense Nuclear Agency will consider the recommended implementation plan for the Defense Nuclear Facilities Safety Board. The recommendation will be made orally or in writing to the Secretary of Energy pursuant to 42 U.S.C. 90-2 (A2209a).

Implementation Plan for Recommendation 90-3 at the Department of Energy's Hanford Site, WA

AGENCY: Defense Nuclear Facilities Safety Board.

ACTION: Notice; recommendation.

SUMMARY: The Defense Nuclear Facilities Safety Board has made a recommendation to the Secretary of Energy pursuant to 42 U.S.C. 90-2 (A2209a) concerning DOE's proposed implementation plan for the Board's recommendation 90-3 (monitoring programs for single shell waste tanks) at DOE's Hanford site, WA. The Board requests public comments on this recommendation.

DATES: Comments, data, views, or arguments concerning the recommendation are due on or before November 19, 1990.

ADDRESSES: Send comments, data, views, or arguments concerning this recommendation to: Defense Nuclear Facilities Safety Board, 625 Indiana Avenue, NW., Suite 700, Washington, DC 20004.

FOR FURTHER INFORMATION CONTACT: Kenneth M. Pustateri, at the address above or telephone 202/205-6406, (FTS) 262-6400.

Date: October 13, 1990.

Kenneth M. Pustateri,
General Manager.

[Recommendation 90-7]

Implementation Plan for Recommendation 90-3 at the Department of Energy's Hanford Site, WA

October 11, 1990

On March 27, 1990, the Board transmitted to you its Recommendation 90-3, regarding the single shell high level waste tanks at the Hanford site. On May 10, 1990, you replied stating that you agreed with our recommendations and accepted them. As of August 10, 1990, you forwarded to the Board your plan for implementation of the Board's recommendations on this issue.

In the intervening time, members of the Board and their staff and technical experts have visited the Hanford site on several more occasions and have further discussed the measures proposed and the plans for implementation. After careful consideration, the Board has concluded that the DOE proposed implementation plan for Recommendation 90-3 is not adequately responsive. In particular, it does not reflect the urgency that the circumstances merit and that was implicit in the Board's recommendations. Nor does it appear that the contractor involved has been required by DOE to marshal the technical and managerial resources required, and to focus them on the problem in a measure commensurate with its gravity.

The Board specifically recommends that the implementation plan be modified as follows:

• Immediate steps should be taken to add instrumentation as necessary to the single shell tanks containing ferrocyanide that will establish whether hot spots exist or may develop in the future in the stored waste. The instrumentation should include as a minimum additional thermocouple trees. Trees should be introduced at several radial locations in all tanks containing substantial amounts of ferrocyanide, to measure the temperature as a function of elevation at these radii. The use of infra-red techniques to survey the surface of waste in tanks should continue to be investigated as a priority matter, and on the assumption that this method will be found valuable, monitors based on it should be installed now in the ferrocyanide bearing tanks.

• The temperature sensors referred to above should have continuous recorded readouts and alarms that would signal at a permanently manned location any abnormally high temperatures and any failed temperature instrumentation.

• Instrumentation should also be installed to monitor the composition of cover gas in the tanks, to establish if flammable gas is present.

• The program of sampling the contents of these tanks would be greatly accelerated. The proposed schedule whereby analysis of two core samples from each single shell tank is to be completed by September, 1999 is seriously inadequate in light of the uncertainties as to safety of these tanks. Furthermore, additional samples are required at several radii and at a range of elevations for the tanks containing substantial amounts of ferrocyanide.
U.S.C.A. Section 2260a(5), approved a recommendation which is enclosed for your consideration.

42 U.S.C.A. Section 2260(a) requires the Board, after receipt by it, to promptly make this recommendation available to the public in the Department of Energy's regional public reading rooms. Please arrange to have this recommendation placed on file in your regional public reading rooms as soon as possible.

The Board will publish this recommendation in the Federal Register. It is to be noted that the enclosed recommendation applies to the Department of Energy's proposed implementation of the Board's Recommendation 90-3 dated March 27, 1990.

Sincerely,
John T. Conway,
Chairman.

[FR Doc. 90-24596 Filed 10-17-90; 8:45 am]
BILLING CODE 6651-KO-M

DELAWARE RIVER BASIN COMMISSION

Notice of Commission Meeting and Public Hearing

Notice is hereby given that the Delaware River Basin Commission will hold a public hearing on Wednesday, October 24, 1990, beginning at 1 p.m. in the Goddard Conference room of its offices at 26 State Police Drive, West Trenton, New Jersey.

An informal pre-meeting conference among the Commissioners and staff will be open for public observation at 10:30 a.m. at the same location and will include discussions of the upper Delaware ice jam project, upcoming Commission hearings and meetings; middle and upper Delaware water quality protection policies and status of compliance with Commission water conservation performance standards for plumbing fixtures and fittings. The subjects of the hearing will be as follows:

Applications for Approval of the Following Projects Pursuant to Article 10.3, Article 11 and/or Section 3.8 of the Compact

1. New Jersey—American Water Company—Western Division, D-81-11 CP Renewal. An application for the renewal of a ground water withdrawal project to supply up to 193,750,000 gallons (mgd)/30 days of water to the applicant's manufacturing facility from Well No. 3. Commission approval on September 23, 1988 was limited to five years. The applicant requests that the total withdrawal from all wells remain limited to 193,750 mgd/30 days. The project is located in Camden, Camden County, New Jersey.

2. Ashland Chemical Company D-8-50 Renewal. An application for the renewal of a ground water withdrawal project to supply up to 8.7 mgd/30 days of water to the applicant's manufacturing facility from Well No. 3. Commission approval on September 24, 1985 was limited to five years. The applicant requests the total withdrawal from all wells be increased from 4.2 mgd/30 days to 8.7 mgd/30 days. The project is located in Glendon Borough, Northampton County, Pennsylvania.

3. New Jersey—American Water Company—Western Division, D-88-81 CP. An application for approval of a ground water withdrawal project to supply up to 34.6 mgd/30 days of water to the applicant's distribution system from new Well Nos. 56, 57, and 58 within existing Well Nos. 27 and 28 and new Well Nos. 59 and 62, and to limit the withdrawal from all wells to 1165.1 mgd/30 days. The project is located in Cherry Hill Township, Camden County, New Jersey.

4. Palmer Water Company D-90-17. An application to approve the withdrawal of 13 million gallons per day (mgd) from the Aquashicola Creek and 13 mgd from the Pohonooc Creek, with the maximum combined withdrawal from both sources not to exceed 15 mgd. The withdrawal will provide raw water service only to existing and prospective industries. Both creeks are tributaries of the Lehigh River. The Pohonooc Creek withdrawal is located in the Borough of Parryville, while the intake is for withdrawal from Aquashicola Creek are located in Lower Towamensing Township, and the Borough of Palmer; all withdrawals are located in Carbon County, Pennsylvania.

5. Boer Aggregates, Inc. D-90-18. A revised application for approval of a ground water withdrawal project to supply up to 45 mgd/30 days of water to the applicant's gravel processing operation from existing Well Nos. 1, 2, 3, and 4, to limit the withdrawal from all wells to 46 mgd/30 days. The project is located in Pohalstown Township, Warren County, New Jersey.

6. Jim Thorpe Municipal Authority D-90-22 CP. A surface water withdrawal project to serve the applicant's distribution systems in the Borough of Jim Thorpe. The project entails an increase of withdrawal, (0.4 mgd to 0.5 mgd) from Reservoirs No. 1 and 3 on Shamokin Raudges Run to serve the distribution system (Eastside System) for the left side of the Lehigh River, and a withdrawal of 0.425 mgd from the