

MINUTES OF NUCLEAR WASTE BOARD MEETING
July 18, 1986

WM DOCKET CONTROL
CENTER

1:30 p.m.
EFSEC Hearings Room
Rowesix, Building #1
4224 Sixth Avenue S.E.
Lacey, Washington 98504

'86 AUG 21 110:42

Board Members Present:

- Warren A. Bishop, Chair
- Senator Max Benitz
- Dr. Royston H. Filby, Water Research Center Designee
- Senator Sam Guess
- Representative Shirley Hankins
- Phil Johnson, Department of Ecology Designee
- Nancy Kirner, DSHS Alternate Designee
- Ray Lasmanis, DNR Designee
- Mike Mills, EFSEC Alternative Designee
- Representative Dick Nelson
- Representative Nancy Rust
- Pat Tangora, Energy Department Designee
- Richard Watson, State Energy Office
- Senator Al Williams

WM Record File 101.3 WM Project 10
 Docket No. _____
 PDR
 LPDR B
 Distribution: REB MSB JOB RDM
Linehan Hilderbrand Hale
JSS Bilhorn D. Kunihiro
 (Return to WIA, 623-SS)

From: Dept. of Ecology, Olympia, WA
 To: Linehan

Others Present:

Robert Shirley, representing Senator H.A. "Barney" Goltz

The meeting was called to order by Warren A. Bishop, Chair.

Mr. Bishop reported the meetings held by the Council in Vancouver this week were productive. The Council reviewed the Defense Waste DEIS and made several recommendations to the Board, which will be discussed later in the meeting, he said.

Minutes

Nancy Kirner read a substitute paragraph 8, page 15, to clarify a response by John Erickson in discussing the Chernobyl accident. It was moved and seconded the Minutes be approved as corrected. Motion carried.

Correspondence

Mr. Husseman referred to the letter from the Chair to Mike Lawrence, Manager of the Richland Operations Office, USDOE, and the original letter from Mr. Lawrence. The letters concerned the Council-recommended Resolution of the Board regarding USDOE

8609100559 860718
 PDR WASTE
 WM-10 PDR

2021

attendance at public meetings. A meeting will be arranged toward the end of the month between Mr. Lawrence and Mr. Bishop to discuss this issue and others that need to be discussed.

Senator Guess remarked he hoped that in the future the talking would be done beforehand. Mr. Bishop said the action came as a result of a heated discussion by the Council, passed on to the Board, and he and the staff felt responsible to bring it to the Board. He said he assured Mr. Lawrence this would not be pursued in a letter form, but by sitting down and talking about it.

The second letter was addressed to Secretary Herrington, signed by Congressman Markey as Chair of the House Subcommittee on Energy Conservation and Power of the Committee on Energy and Commerce. The Committee had requested documents from the Secretary and the Department of Energy related to the decision-making process which led up to the final recommendation of the three sites for the first repository. The response from USDOE was that the documents prepared in the process were not retained. The Committee was highly critical and stated they were resubmitting questions, with the end of July for a response date. They indicated that if the response was not satisfactory they would require the appropriate people to appear and provide sworn testimony to the Committee. This information is particularly important to the state of Washington in its pursuit of its litigation on the ranking methodology, he said.

Mr. Roe introduced Narda Pierce, Assistant Attorney General, who had joined the litigation team of Mr. Roe, Mr. Lean and Mr. Goltz. She will have the sole responsibility of keeping that litigation moving. He also introduced Larry Oates, intern, who is also assisting the team.

Referring to the letter just mentioned by Mr. Husseman, Mr. Roe said his office had contacted the Justice Department, which represents the U.S. Department of Energy, to determine if they would be willing to enter into an order which would preclude any termination of documents. Today word was received from the Justice Department on behalf of USDOE that they were not willing to enter into an agreed order, so the state will be filing on Monday an emergency motion with the 9th Circuit Court of Appeals in the comprehensive case, brought in part on behalf of the Board, asking the Court to enter an Order designed to preclude any termination, or further termination as there has been in the past, of any of these documents. An associated document dealing with a request for discovery and production of the documents related to the subject matter contained in that letter will also be filed.

A third letter was a response from the USDOE to Representative Nelson's inquiry at the May 15 Board meeting concerning the amount of plutonium excluded from coverage when USDOE went from 10 nCi/g to 100 nCi/g in their definition of transuranics. The answer was 20.5 kg of plutonium.

Mr. Husseman said the Board had indicated at the last meeting it would like to have more detailed information concerning the amount of dollars spent at Hanford for environmental-protection type activities. Earlier documents did not respond to the request. Mr. Husseman said the document before the Board entitled: "Environmental Protection and Defense Waste Management at U.S. Department of Energy Atomic Defense Facilities Based on the Fiscal Year 1987 Budget Request" had just been received in the Office. It had not been reviewed and he suggested the document be referred to one of the Committees for study and a report to the Board. Mr. Bishop referred the document to the Defense Waste Committee for review with staff support.

Mr. Husseman referred to the two documents Representative Isaacson requested be handed out: "Credibility" and "The Politics of Nuclear Waste Management".

Another document received after the notebooks were mailed was a Resolution of the Association of Washington Cities, adopted at their annual meeting. It calls to task the USDOE for its decision to postpone indefinitely the second round of the repository process, and makes a statement of their position on the selection of Hanford as being "opposed to siting a national nuclear waste repository at Hanford unless the USDOE demonstrates by scientific studies, analysis, and independent overviews that the flood basalts at Hanford can isolate the nuclear wastes and spent fuels from the environment to a greater extent and degree than any other geologic media." Mr. Bishop added the document also resolved that it supports the Nuclear Waste Board as the spokesman for the state of Washington in its endeavors to assure that the United States Department of Energy meets all of the requirements of public law and public concern in selecting and evaluating potential nuclear waste repository sites;"

Another Resolution contained in the notebooks was one introduced by Governor Gardner, Governor Bryan of Nevada, and Governor Evans of Idaho at the Western Governors' Association. It was adopted unanimously on July 8. The Resolution makes a strong statement by the Western Governors as a group urging Congress and the President to suspend all further work on site characterization for a first repository for high-level nuclear waste and spent fuel until work on the siting and development of a second repository is recommended and on a schedule reasonably intended to meet all statutory deadlines; or alternatively, to reconsider and recall their decision to recommend and approve three sites located in the Western states for characterization for the nation's first repository; and to begin immediately a comprehensive nation-wide search for the best available site for such a repository, to include all known appropriate geologic media, including granite. Mr. Husseman said this Resolution was very similar to the one adopted unanimously by the Western Attorneys General Association, and the one adopted at the NCSL First-Round States Working Group, and the Nuclear Waste Commission in the state of Nevada.

Draft Resolution Recommended by the Advisory Council

A Draft Resolution recommended to the Board by the Advisory Council was presented. As a background for the Resolution, Mr. Husseman briefly updated the appropriation process in Congress as it relates to the shutdown of the second repository. The USDOE indefinitely postponed the second round process on May 28. Shortly after that the House Appropriations Committee, in reviewing and adopting the USDOE budget, fully funded the first round of the site selection process, eliminated the MRS, and eliminated site specific activities for the second-round repository, funding only generic studies for the second round. This, in effect, ratifies the decision of the USDOE to postpone the second round indefinitely. This action was taken over the written objection of Congressman Udall, one of the prime movers of the Nuclear Waste Policy Act in the House. He sent a letter to the House Appropriations Committee indicating this action would be contrary to the mandates of the Nuclear Waste Policy Act, its intent and policies. He requested that the Committee not take that action.

Mr. Husseman said there is now action in the Senate that would attempt to reverse the House action or to zero out the site-specific activities for the first round and bring the entire process to a halt.

It was moved and seconded that Resolution 86-4 be adopted.

In further explanation of background for the Resolution, in response to Representative Hankins, Mr. Husseman said following the May 28 decision a letter signed by ten Senators, including both Washington State Senators, Senators Laxalt, Domenici, Hecht, Bentsen, McClure and others, plus Congressmen Udall and Morrison, was sent taking USDOE to task for violating the direct mandate of the Nuclear Waste Policy Act. The letter instructed the USDOE to reverse its decision or come forth with language to amend the NWPA. The House Bill will go to the floor on Tuesday, and no hearing has yet been scheduled in the Senate Appropriations Committee, chaired by Senator Hatfield.

In discussion following, Nancy Kirner pointed out that Item 2 in the Resolution would have the effect of canceling any future grants to the state of Washington until the issue was resolved. Mr. Husseman said if BWIP were not funded, the state program would not be funded, depending upon how "site specific" is defined.

Mr. Bishop added that during the time the Resolution was being discussed, there was a lot of coverage in the papers of the actions and statements being made by the Congressional delegation. This created a great deal of interest. Representative Hankins agreed, but expressed concern about "trial by Editorial Boards" and with the litigation being pursued by the state, and other statements by the Board. She questioned if such a Resolution were an effective way to solve the problem. Mr. Bishop asked Mr. Roe to explain how discontinuing funding for the second-round site-specific activities would affect one of the state's cases.

Mr. Roe said, quite briefly, it would do no good. It would be an implied modification of the Nuclear Waste Policy Act as it relates to the mandates to meet the nomination and recommendation requirements of the second-round repository. It would be clearly undesirable in terms of a successful outcome of the litigation, he said.

Representative Nelson said he read Item 2 as being a message to Congress to keep the second round process alive. He thought that would be a strong, strategic position to take. Mr. Husseman said the Resolution passed last month called for the process to be stopped and be restructured. Resolution 86-4 would provide the opportunity for restructuring.

Senator Williams said one of the justifications for delaying the second-round process was the inappropriateness of spending this kind of money when the government is running such large deficits. However, he noted that the monies supporting the repository program are derived from a dedicated fund, which should not be affected by the national deficit. He said he was perplexed at the rationale by USDOE. Mr. Husseman said at this point the monies come from the ratepayers although USDOE will, out of their defense side of the budget, eventually be contributing to the Nuclear Waste Fund when the allocation is agreed to. Representative Nelson recalled that Roger Gale of the Office of Civilian Waste Management, USDOE, stated in Denver that technically, USDOE had to meet Gramm-Rudman objectives, even though the fund is dedicated.

In response to a question as to the Committee's action on MRS, Mr. Husseman said no funding was provided, as the state of Tennessee has an injunction against USDOE from delivering the MRS proposal to Congress. Nancy Kirner said this was a worthwhile goal, but funding would have to come from state dollars, rather than Federal dollars.

The motion was called. The vote was in doubt, as many members did not vote.

Mr. Lasmanis suggested that the Chair reintroduce the motion at a future time, if desired. He expressed concern that there was a potential cost attached to the Resolution and said he would like to know the impact on the litigation, monitoring, and environmental studies under way. He asked if those costs could be handled by the state under the present economic climate. Mr. Husseman replied if there were no BWIP and no repository program, there would be nothing for the Board and Office to do. Litigation is currently being funded with General Fund dollars.

Pat Tangora asked if the state funding would be adequate to monitor the restructuring process. Mr. Husseman said, as a practical matter, he could not visualize USDOE eliminating BWIP before deciding to do away with the whole repository program at Hanford.

Mr. Roe said in response to Mr. Lasmanis' questions that litigation would not be affected, as funding is being provided with state funds. Secondly, he said, he noted the Resolution does not suspend the whole program and he assumed the author intended a continuing program. Mr. Husseman said it was written in the same wording used in the second-round decision, in that they eliminated funding for site-specific activities. How that would be implemented, he said, depends on how the final appropriation would be worded.

Estella Leopold, Advisory Council Member, said the Council had passed the Resolution, as well as the Oregon Advisory Committee at their meeting in Vancouver. It was revised and passed as amended at the Council meeting this morning. She expressed disappointment at the lack of interest in the Resolution by the Board. She suggested the Board select the most important elements, in their opinion, and proceed. She felt it was important to respond in support of the Governor's position on the second-round repository program.

Senator Williams expressed his support for the Resolution as he thought it consistent with the position of the Board. The Board recommended last month that the two processes be combined into one site selection process, and this Resolution further identifies that these activities should not be funded until that one program is developed. He said he did not understand the fear of the loss of money coming to the state from the Federal government. The Act requires the participation and funding of the states when the program is in operation. If there is a program, there will be funding for the states, he said. If no program, there is no need for funding of oversight activity.

Nancy Kirner said her concern was that the state would not be able to participate in the restructuring of the political process. She felt there would be an even greater need to monitor action in Washington, D.C. to make sure the new rules are at least as equally fair to the state of Washington, should the program be restructured. She suggested this element be addressed in the Resolution. Senator Williams agreed this problem needed to be addressed. He said if the funding is cut off, he would hope USDOE would not be able to draw on the funds from the dedicated source to continue their activities without supporting state activities.

Representative Nelson suggested this issue be referred to legal counsel, asking them to address the problem and bring back suggested language. Mr. Bishop asked interested members to meet with Mr. Roe and clarify the language of the Resolution to meet any objections.

Bob Shirley asked for identity of voting members. Mr. Bishop replied only the Legislative members were non-voting members. All regular members or their legally-designated Designees are entitled to vote. The Chair also has the authority to vote. Designees, or Alternate Designees, are required to have an authorizing letter on file with the Office.

Proposal for Workshop, Seminar Series with Publication

Estella Leopold presented the Board with a two-page proposal entitled: "Pre-Proposal for: Workshop, Seminar Series with Publication". She said she had suggested this to the University of Washington as a new educational outreach effort. Because the state Nuclear Waste Act recognized the fundamental importance of an outreach to the public by the state on issues related to the nuclear waste program she drafted the proposal with Robert Lee, Professor of Forestry (Social Scientist) to provide an objective interdisciplinary discussion of the chief issues: the economic and eco-system impact of radionuclide releases in the Columbia Basin in Washington.

The proposal describes the points, to include a Workshop, Research, a Seminar Series, and publication. She solicited funding from the Board with the results being presented to the Board in the form of a document, which could be used for dissemination to the public. She said the major expense would be student help from graduate students. The budget was not entered, as details were not yet worked out, but she estimated about \$16,000 of student help, and a final estimated figure of \$40,000, without University overhead.

Ms. Leopold said a full copy of the proposal is available from their staff. She said this proposal was submitted for the tentative reaction from the Board.

Discussion of the proposal followed and Senator Guess expressed concern about anticipated attendance and sufficient funds to do an adequate job. Dr. Filby suggested a more logical approach might be to bring groups of faculty with a real interest together and let them set up a seminar series. He thought then the interest and research programs would develop. He felt it unnecessary to finance or stimulate faculty interest by providing them with student help, which they should have anyway from their own research programs.

Representative Nelson considered the idea a good one, and wondered if there were a way to relate the proposal to the Defense Waste DEIS process and the site characterization on commercial waste. He said he had observed that expecting the public to get far into technical documents, and the key questions addressed by that document or the critique, is very difficult. Therefore, consultants are hired to critique the consultants of the USDOE. Although it is too late for the Defense Waste DEIS, there will be Records of Decision issued, and perhaps the Board could structure some program to involve interested public in the debate between the two sets of consultants. Providing a forum for the public to tune into these technical debates would be a good idea, and he thought the proposal could be adapted to do that. He suggested the Board and the USDOE sponsor such debates before final comments are written by the state.

Estella Leopold explained they were approached by two business people in the Seattle community expressing their anxiety about the business community not appreciating the full aspects of potential socioeconomic impact in the Columbia Basin, and the potential damage to the economy. The proposal, she said, was in response to that concern, and these business people had provided \$2,000 to get started.

Mr. Bishop thanked Estella for acquainting the Board with the proposal. He said the Council is considering it and is in the process of determining guidelines for this type of proposal.

Public Comment

Janis Byrd said she thought graduate students, professors and researchers have much of this material already available to them, and the grant money sought might be better used to educate and reach the public with only some knowledge, but mostly curiosity.

Senator Benitz expressed his concern that such a plan might not be objective enough. He said he noticed names of proposed participants who are not known for scientific achievement or for having a somewhat biased opinion. Speaking of economics and the Hanford impact on economics of the area, he said there was absolutely none. What there is, he said, is an outgrowth of the difficult times being experienced on the farms. He said he has farmed in the shadow of that project for forty years with no problems and the farmers in the Columbia Basin who are honestly trying to make it object very much to the kind of statements some of their fellow farmers have made. He said it is a very serious concern.

Committee Reports

Defense Waste Committee - Contractor Report on Defense Waste DEIS. Mr. Bishop introduced Joe Stohr, new member of the staff of the Office of Nuclear Waste Management, who will be the staff person on defense waste. Mr. Stohr was the Program Manager for the Radioactive Waste Program, Office of Radiation Protection, Department of Social and Health Services. He said the Defense Waste Committee had met and the report would be given by Dr. Brewer.

Dr. Brewer referred to the report prepared by the URS Corporation and distributed to the members. URS Corporation is one of the contractor team, with Grant Bailey as the Project Manager. Others included Mark Schaffer, Engineering Geologist with Converse Consultants, and John Held, Nuclear Engineer with Energy Incorporated of Boise. All three were present and introduced to the Board.

Dr. Brewer said the URS Report is only part of the technical comment that will be proposed to the Board as part of the overall statement. It has become apparent in reviewing the DEIS that there are some technical concerns with a couple of the Appendices which have been noted, areas that need more work or clarification. In the handout of June 17 that was used in the five public meetings around the state on the Defense Waste DEIS, six policy and six technical concerns were identified that the state had at that time. Since that time, two or three more were added.

Principal technical concerns include inadequate or no treatment of the chemical and mixed wastes, which are an intimate part of the overall defense waste picture and amount to hundreds of thousands of tons. Director Riniker highlighted this concern to USDOE at the Seattle meetings and the issue will be pursued.

Dr. Brewer said there are some changes pending in the responsibility or the authority of the states under the Resource Conservation and Recovery Act (RCRA). The state may have a much stronger voice in the future concerning these mixed waste streams than was contemplated when the investigation was begun.

The item of postclosure monitoring of a deep repository co-located with defense waste in a shallow environment is still a concern.

Dr. Brewer said these are all areas the state feels should be included in the Final EIS, and there is time to do that, as this is only a Draft EIS.

Appendix B: The state feels, based on industry experience, that there may be better ways, less expensive, faster and safer, to recover some of the single-shell tank wastes which would be classed as high-level waste by any set of definitions. There would be between thirty and forty of the 149 tanks that meet this criteria. One reason for this is that, as Senator Guess has pointed out on more than one occasion, there are a number of valuable materials in those wastes. A second reason is that if those wastes can be recovered safely and cost effectively for treatment, life would be a lot more simple environmentally. The dangerous chemicals and radioactive components could be isolated, and the rest would be a low-level waste stream that could be disposed of using current technology.

Technical Workshops: With a positive response from USDOE, Dr. Brewer said the state is prepared to sit down to have a series of technical workshops, with engineers talking to engineers. There is a facility at the Savannah River Project that would be ideally suited for this with a very low cost and fast testing time.

Appendix M: The contents of Appendix M in the DEIS relate to the engineered barriers which would be required and essential for the stabilization in-place alternative, and findings in this regard.

Grant Bailey of URS, Project Manager for the technical review of the Defense Waste DEIS, said they were assisted in their review by Energy Incorporated and Converse Consultants.

Mr. Bailey distributed an Executive Summary of the Technical Review, which will be bound into the main document. He walked the Board through the document, with a summary of their conclusions. He said the final document from URS will be delivered August 4, and they would be open to receiving comments until a few days before that time.

Chapter 4 of the URS document contains the most important elements, in their opinion, of their reference check conducted throughout the whole document. Mr. Bailey said those areas that they felt were worthy of further work were translated into questions and approximately eighty questions will appear in the final report. Areas not considered crucial were not asked as question, he said.

Representative Nelson asked how URS treated an assumption that had no reference. Mr. Bailey said they were taken on a case-by-case basis. In some conclusions they felt were not well supported, that was then brought up, even though they did not see a reference check. The Silla tombs in Korea were cited as an as a classic example of the way an impervious barrier might work. This appears in the DEIS as well as the Summary which was distributed much wider than the DEIS. It tends to enforce the conclusion that this is a proven technology, when, in fact, he said that particular reference was not provided at all.

Mr. Bailey said because of the size of the document, it was difficult to make a concise summary without being misleading. In general, he said there were a number of references that did not seem to be confirmed. The principal concern was what they felt could have

been a much more likely worst case was not done, in some instances, and USDOE seemed to be using some numbers that were overly optimistic. Many of these pertained to the barrier and its effectiveness.

Mr. Bailey continued by saying their document was fairly well organized and written to be readable and understandable as far as they could possibly do it. The Table of Contents is identical to the DEIS, and the problem or issue is highlighted under that topic. Some of the principal issues include Precipitation Assumptions, Barrier Performance, Radionuclide Release and Transport, Groundwater Movement, Compliance with EPA Standards, and Worst Case (Conservative) Analyses.

Senator Guess said he understood surfactants (containing Cesium 135) were also present in the existing tank wastes, in addition to the sludge and salt cake. He asked what other liquid wastes were expected to be generated by other sources through 1995. Dr. Brewer pointed out that in this part of the URS Report they were simply summarizing data that USDOE put in the DEIS. USDOE did not mention surfactants, solvents, complexing and chelating agents that we know are present there. Senator Guess said then they should be asked to include these elements. Dr. Brewer said they had done that in another challenge.

Senator Guess then referred to page 311 of the URS document where it was stated that "because geotextiles will probably have negligible tensile strength" and asked if that came out of the DEIS or was it their conclusion. Mr. Bailey replied that was their conclusion. Dr. Brewer said the only specific textile that they contemplate is one which is composed of a silica thread. When he was in Richland last week he asked if there were going to be any resin to isolate those silica threads, and was told no, that it would be pure silica. This means it is exactly the same, in terms of strength and resistance, as glass matting or roving that is capsulated in fiberglass structures. It is a very weak material, that's the only specific geotextile that is mentioned in the DEIS, and it was known there are many others. Senator Guess thought this also worthy of mention. Dr. Brewer said specificity and spec sheets would certainly be appreciated.

There was further discussion of textiles and Mark Schaffer, Senior Geological Engineer with Converse Consultants, said the statement referred to by Senator Guess was one he had written. He said this document is a working draft, and this was one sentence he intended to change. He said to his knowledge any silica glass geotextile would have a negligible tensile strength. The materials that have a polymer or acrylic binding, or resin binder, have the durability problem. He said there was not, in his experience, sufficient data to indicate a 10,000-year durability for that type of material. He said they were asking for the very point raised by Senator Guess, and needed trade names and specifications for at least some sort of quantitative data. He said the geotextile itself is only a minor element of the barrier and if it failed by itself the barrier would not necessarily fail. And, he said, a barrier could fail without a geotextile. It said it was a very complicated subject which merits a lot of discussion among the people involved.

Dr. Filby said Battelle criticized very strongly our statement on Appendix M, and asked to be brought up to date on the controversy. Dr. Brewer said there were wounded feelings on both sides. He said he had talked to all of the principals and their managers at Richland since the issue was raised. There is an agreement that all parties must sit down and go through it point by point, line by line. He referred to the Golder Report which was a very critical analysis of the 1982 Site Characterization Report. The state also submitted a critical report, as well as USGS and NRC. The technical people sat down with the USDOE he said, and went through line by line. In some cases, there was agreement, in some not, and for those where there was a disagreement, reasons were given and in

some cases there was an honest difference of opinion between professional peers. That format is appropriate, he said, and in discussing this with the Battelle Manager he agreed that this be done, and they are anxious to proceed.

Representative Nelson referred to the conclusion by URS that if more conservative assumptions were made the move would be made to more geologic disposal. He asked if that applied uniformly to the sites, or did they mean that more of some of the wastes should go to geologic disposal and others could stay in-place. Mr. Bailey replied that most of the citations USDOE used that URS thought were not conservative were broad-based assumptions affecting the overall area, and not specific to single-wall or double-wall tanks. In this case, Representative Nelson said, the analysis would suggest there should be a move all the way to geologic disposal. Mr. Bailey said they had not concluded that, but have raised some questions that suggest that given the uncertainties, if a more pessimistic analysis was done, that it appears any waste treatment outside the repository will not work quite as well as the Draft EIS suggested it might. In that case, he said, it is probably safer to put the wastes into a repository.

Dr. Brewer added that it is not being said an engineered barrier cannot be made which will effectively accomplish the purposes of protecting a site stabilized in-place, as the DEIS leads one to believe. It is stated that Appendix M does not give the confidence and backup. For this reason he said it is desirable to have the engineers on both sides sit down with a document that can be reviewed by any other engineer as a peer.

Senator Guess asked if consideration to the use of bentonite was given. Dr. Brewer said they did not, and that raises another point. There are constant references in Appendix M as to what field work has been done, including some of the best work done by Ray Isaacson some years ago, but they absolutely failed to mention the work that has been going on in the USDOE laboratory in Los Alamos since 1981. It was found that a 2% mixture of sodium bentonite toward the bottom of a barrier appeared to enhance the performance. He said he found this disconcerting as no mention of this was made even in the literature list of Appendix M.

Senator Guess thought the state should be specific about this omission. Dr. Brewer said in an arid climate, bentonite in small admixtures appears to help the capillary barrier effect. It can't be used like any other swelling clay that will be constantly saturated and resaturated as it dries and cracks. Los Alamos is an arid climate, he said, but in personal observation of Korea he said he saw no semi-arid climates. Many of these ancient tombs are in wet areas that are constantly saturated, and they use Kaolin he said, which is the cover. Reference to the Korean tombs, he added, is absolutely out of line.

Dr. Brewer said he would welcome any letters or notes of a technical nature for consideration in the few days left to compile the comments.

Representative Nelson asked if in the review of the DEIS the focus was on the barrier and the assumptions that relate to the performance of that barrier. Mr. Bailey said they were directed to look at anything having to do with waste disposal and handling aside from biology, health effects, socioeconomics, and transportation. They looked at the whole document as broadly as they could, and as they arrived in certain areas there appeared to be topics much more important than others. It was obvious, in the first week, that the barrier was a very important issue. It was also one of the areas of inconsistency and disagreement, he said. USDOE has stated there will be studies coming up, but they have proceeded to conclude that everything would probably come out just fine.

Dr. Brewer referred to the statement by Battelle in their correspondence that if the concept of the engineered barrier cannot be supported then that part of the DEIS is "in jeopardy".

Representative Nelson said he had focused his review on the plutonium and transuranics that remain and he thought some of the assumptions in the DEIS were somewhat shaky. He said he noted any critique of those assumptions. He questioned their estimate of the amount and their assumptions about redistributing these wastes, as there were no references to support these. He said these questions, and there may be others, may be of lesser importance than barriers, but they do cast doubt on the document. Dr. Brewer stated it is a certainty there will be other questions after the comment period has expired, and it was encouraging to have these issues pointed out. Mr. Husseman said it appears that USDOE will not come out with a final action plan, at least for a large segment of the wastes now stored there, when the Final EIS is issued in a year or more. The state has consistently taken the position that if further study is going to be done in the future the state would expect additional, similar opportunity for citizen and state comment. These questions could then be asked at that time.

John Held of Energy, Inc. stated he did the detailed reference checks on Appendix A, which spoke to the waste characterization. Basically, he said, there is one reference upon which all the numbers cited in Reference "A" are based, and that is a large document prepared by Rockwell Hanford Operations. He said he checked the numbers and all the tables between the two documents to see how they correlated. He said he found what appeared to be a couple of errors in transcribing the data from the Rockwell document into the DEIS. Those have been pointed out in the consultant's document.

Representative Nelson questioned the assumption that a glacial flood redistributing the plutonium within the repository zone to a depth of four meters would cause minimum exposure. Mr. Held said they chose not to dig into that particular statement as the other effects of such a large flood of the Pasco Basin would outweigh the dangers associated with plutonium being redistributed. He said the whole area would be wiped out. Representative Nelson said USDOE assumes a uniform distribution, which would give a negligible dose to anyone residing there, but concentration does sometimes occur with water movement, and there is no mention of that. He wondered if there were other assumptions that gloss over reality. Mr. Held said in that particular case, they made their own decision to gloss over it, as there was a good 250 pounds of reference material and some decisions had to be made as to where the time allotted would be spent.

On behalf of the Board and staff, Mr. Bishop thanked Mr. Bailey and his team for their thorough efforts in doing a constructive job within the confines of the time span. Mr. Bailey responded it was his goal to produce a report on time, be as thorough as possible within the time constraints, and have it readable.

Advisory Council Recommendations

Mr. Bishop reported the Advisory Council, at its meeting July 17 in Vancouver, developed a list of recommendations to the Board after reviewing the Defense Waste DEIS. Dr. Brewer reviewed the recommendations, listed below:

1. The Council strongly supports a thorough and prompt cleanup of Hanford defense wastes, based on recovery and treatment, regardless of where their

ultimate disposal is to take place. Continuation of present waste management practice is unacceptable.

2. The Council reemphasizes its concern that the full NEPA process be followed in all significant actions and Records of Decision.
3. We call attention again to the issue noted as Number 6 in the technical issues list of July 17, 1986: the Final EIS must describe the impact of alternative means of defense waste management on the ability to monitor postclosure performance of deep geologic repository.
4. The state's comments on the DEIS should reflect the objective of maximum protection of the environment, health and safety, irrespective of costs.
5. In the future, with respect to defense waste, USDOE should consider geologic media other than the shallow sedimentary deposits of the Hanford Reservation for disposal.
6. The Council notes with concern the serious problems created by USDOE in its shifting and expedient definitions of high-level, low-level and transuranic defense wastes. In order to obtain an accurate picture of the quantities and hazards of Hanford defense wastes, a consistent and rational set of definitions must be part of the Final EIS, and there must be consistency with definitions of high-level, low-level, and transuranic wastes employed by other federal agencies.

Mr. Bishop said these recommendations will be incorporated into the state's comments.

Comments by Senior Attorney General

Charles B. Roe, Senior Attorney General, presented an eight-page memorandum to the Chair, commenting on the Defense Waste DEIS. The document centers on legal issues dealing with the concerns about the DEIS and some technical-legal issues. He touched briefly on the legal issues consisting of five main points:

1. Preferred Alternative. None is stated in the DEIS.
2. Reasonable Alternatives. DEIS lacks the description of all reasonable alternatives required by 40 CFR Part 1502.14.
3. Compliance with Federal and State Law. A listing is set forth of the applicable laws with which the DEIS must be in compliance.
4. Hazardous Wastes--Resource Conservation and Recovery Act (RCRA). The discussion of the applicability of RCRA to proposed activities is inadequate.
5. Section 8, Nuclear Waste Policy Act. DEIS does not describe how the commingling of defense waste and commercial wastes will apply to the alternatives mentioned.

Note: A complete copy of the memorandum is available on request from the Nuclear Waste Management Office.

Comments from the Public

Susan Hall of Hall & Associates, contractors who organized the public meetings around the state, said a draft summary report of the comments had been distributed to the Board. They had been tape recorded, and a copy of the tape recordings have been furnished USDOE. The comments have been categorized into fifteen different sections, and the essence of the comments will be listed with a name, if possible, both oral and written. These will be separated according to reference to Defense Waste, BWIP and Other. Copies of all written comments and the feedback forms received will be included in the submittal to the Nuclear Waste Management Office.

Representative Nelson thought the future production of military wastes should be addressed. The DEIS makes the assumption that waste will be cut off in 1995, or that there will be another 20,000 tons of uranium that would need to be reprocessed after that, which is added into the total amount of material. He thought the state should question the basis of that assumption and request on what military programs they base that assumption, including specific weapons systems that would require 10,000 tons, and if there were other weapons systems contemplated that could extend the production of waste beyond that. He thought the citizens of the state have a right to know what the government believes is important in terms of military programs that require the state to accept the responsibility of the wastes produced.

Another aspect Representative Nelson thought needs to be addressed is the whole question of funding. He thought the state should start pressing for some guarantee there will be funding with a dedicated source. He added that the ability of the state to monitor and independently critique the ongoing activities, and the need to prove such elements as the engineered barriers are going to perform the way USDOE claims they will also depend on adequate funding. He said there never has been a guarantee the Nuclear Waste Board and the Office of Nuclear Waste Management will receive the financial support they need to follow this program.

Another issue that might be raised outside the response to the DEIS he said is assistance to the citizens to enable them to understand the technical issues. He thought both the state and the USDOE would agree there is a need to allow people to become more involved in the technical issues. He proposed that a better way of providing information be explored, perhaps through forums with technical experts on both side of an identified technical issue. He said he understood from the USDOE that people are operating under a prescribed formula as to how they must present the issues. If true, he thought the state had the responsibility to help to modify that in order to do a better job of getting the issues before the people.

Nancy Rust said concerning the funding of the defense program, she was discouraged as she perceived there was a doubt whether or not there would be any money. She believed that all of the costs of the production of defense materials should be included in the product, and that would include the cost of disposal. This would eliminate a separate appropriation by making disposal a part of the total.

Resolution 86-4

Ray Lasmanis moved to reconsider Resolution 86-4. The motion was seconded and passed.

Mr. Lasmanis said Council members had refined the language of the resolution and added additional language to reference the funding for physical activities, such as shaft drilling, underground drifting, etc. He moved that Resolution 86-4, as amended, be adopted.

Nancy Kirner offered an amendment which was modified, adding words "in Congress" in the first WHEREAS. It was moved and seconded this wording be accepted. Motion carried.

Nancy Kirner offered a second amendment to include added wording in the second RESOLVE, "with fully funded participation by first round repository states", and eliminate the words "viability of". Ms. Kirner moved the amendment be accepted. The motion was seconded.

David Stevens, representing the Yakima Indian Nation, suggested on this motion it might be advisable to add "affected Indian tribes" as a standard practice. He also said reference to the NWPA might solve the funding question, as there is a provision in the Act about the close-out funding, so there may be a residual ability to use the Act rather than trying to refine the language.

Mr. Filby thought this wording unnecessary as Mr. Husseman had stated as long as activities are going on that affect the state of Washington, funding is provided under the Nuclear Waste Policy Act. Mr. Watson said, although this is correct he saw no harm in emphasizing the state's position.

Mr. Bishop called for a vote on the amendment. The motion carried and the amendment was adopted.

Nancy Kirner moved to accept the suggested language to include the affected Indian tribes. Motion seconded and carried.

Mr. Bishop called for a vote on the adoption of Resolution 86-4, as amended. Motion carried. (Copy attached)

Special Meeting of the Board

Mr. Husseman said because state comments must be delivered to USDOE on August 9, it was suggested a special meeting of the Board and Council be held on August 5 to consider the final package of comments. At this meeting the comments would either be amended or approved. The final document will include the policy issues raised, the legal issues, additional technical issues not raised in the contractor's report, and the citizens' comments.

Mr. Husseman referred the members to the Oregon position paper on the Defense Waste DEIS before the Board. Also distributed was a draft of the comments of the Northwest Citizens Forum, the Governor's testimony, and the Chair's testimony given at the formal hearings.

The Citizens' Forum will meet on August 5 in Seattle to do their final report. A copy of the contractor's preliminary report was sent to all members of that Forum. Mr. Husseman said any additional comments to be considered should be transmitted to Dr. Brewer.

The Board was advised the National Conference of State Legislatures would be meeting in New Orleans from August 4 through August 7, and some Board members would be attending those meetings.

Mr. Bishop said, with the time constraints on filing the comments, a joint meeting of the Board and Council would be held at 1:30 p.m. on August 5 in the EFSEC Hearings Room.

Other Comments

Nancy Kirner inquired if the Board had taken a position of some generic issues related to the DEIS, such as an endorsement to proceed with the glassification and grouting facilities. Mr. Husseman said other than approving the preliminary draft of the comments, the Board had taken no positions on specific items. To date, review of comments is all that has been done. Mr. Bishop said he hoped the Defense Waste Committee would address the issue mentioned, and he suggested that they do so before the next meeting.

Oregon Report

Mary Lou Blazek, Hanford Program Coordinator of the Oregon Department of Energy, reported the meeting of the Hanford Advisory Committee with the Nuclear Waste Advisory Council of Washington was a good meeting, with very good attendance from both groups. She thought it was effective and helpful for those groups to meet together and once more strive for a strong, regional approach to Hanford issues.

On June 3, Governor Atiyeh of Oregon announced his intention to take legal action on USDOE's decision to recommend Hanford for characterization. On June 27, the state of Oregon filed the first of two legal challenges to the Hanford selection. The Attorney General will seek judicial review of the Guidelines. In addition, the manner in which USDOE re-ranked Hanford from the last among five to one of the final three sites will be challenged. The Oregon Attorney General's Office will continue to work with the Washington attorneys on the litigation issues.

Governor Atiyeh met with Ben Rusche in Washington, D.C. on June 17, at which time the Governor requested direct USDOE funding for Oregon. Mr. Rusche assured the Governor that an agreement on funding will be reached by mid-August. Congressman Wyden initiated a letter to Ben Rusche, indicating support for Oregon's direct funding request. The letter was signed by all Oregon members of the House of Representatives and has been provided as a handout.

With regard to Congressional activities, Ms. Blazek said HR 5148, a new piece of legislation, has been introduced and sponsored by Representative Weaver and AuCoin, to be called the Nuclear Waste Policy Act Amendment of 1986. The bill would provide Oregon with the same rights as Washington for site selection review and the approval process. It would nullify the President's May 28 decision and require a new recommendation by January, 1987. The Rock Diversity Guideline in the NWPA would be deleted, and if a second repository is not deemed necessary by January 1, 1987, USDOE's recommendation of three sites would be delayed two years and USDOE would choose from at least seven sites, including two crystalline sites. This legislation would also require USDOE to prepare an EIS prior to site characterization. The bill will be held in the House Interior Committee, chaired by Congressman Udall.

Three amendments to the Energy Appropriations bill will soon be initiated. Mr. Weaver's amendment will deny funding for the N-Reactor. Mr. Morrison will request that more funds be diverted to the second repository, and that the MRS be refunded.

The Environmental Compliance bill, which would place EPA as the oversight agency for USDOE activities, is pending.

The investigation of the 40-year document review information is continuing also at the Congressional level. The investigating committee has received a response from USDOE on the written questions they submitted, and Congressman Wyden's staff indicated all the questions asked had not been answered satisfactorily. The review will continue.

The Oregon position on the Defense Waste DEIS was handed out earlier, and the public hearing was held on July 10. Approximately 100 people testified, with about 1,000 members of the public attending the hearing. Lynn Frank, Director of the Oregon Department of Energy, presented testimony for Governor Atiyeh on behalf of the state. Congressmen Packwood, Wyden, Weaver and AuCoin also testified. Senator Joyce Cohen presented testimony on behalf of the Oregon Legislature supporting the Oregon position. The League of Women Voters also testified in support of the Oregon position. Ms. Blazek said she understood Oregon and Washington Physicians for Social Responsibility have a substantially similar position, which should help to provide another strong, regional approach to the issue.

Ms. Blazek paraphrased the remarks made by Lynn Frank at the July 10 hearing. Copy of his testimony is available upon request from Ms. Blazek.

Concerning the resolution discussed at the joint meeting in Vancouver and by the Board today, Ms. Blazek said the Oregon Advisory Committee did support the intent of the resolution yesterday. Because of the changes made, she said they elected to delete their written, printed support on the resolution. With direction from the Board, she said, she would be pleased to direct the Committee report to the Governor and indicate the Board would like his support. Mr. Bishop urged Ms. Blazek to take what steps were necessary to have Oregon join in the adoption of the resolution.

Ms. Blazek said a response has been received from USDOE and NRC regarding the joint letter signed by Governors Gardner and Atiyeh requesting more meetings to be held in Richland. She interpreted them to indicate they agreed Ben Rusche would write another letter. NRC stated they had sixteen meetings in 1982, only five of which were held in Washington, D.C. This may need to be pursued further.

Richland USDOE

Jim Mecca of USDOE Richland said they had no comments. Representative Nelson asked if USDOE had a response to his question concerning the funding of the Hanford Historical Documents Review Committee. USDOE had indicated they would not support any more than the first phase of that study. Mr. Mecca replied he had discussed this with Mike Lawrence, but he did not know the reason for their position to fund only the first phase. He suggested pursuing this with Mr. Lawrence at their proposed meeting.

Recommendation of Advisory Council - DEIS (continued)

Mr. Watson moved that the Board accept the recommendations of the Advisory Council and incorporate them into the state's comments. There was a second and the motion was carried.

Low-Level Waste

Report postponed to a future meeting.

Public Involvement

Report postponed.

Litigation Status

Charlie Roe stated a preliminary injunction would be filed on Monday relating to alleged document destruction. A response from the Justice Department has been received and there will be an affidavit provided to his office dealing with their position on the subject.

In the litigation surrounding the May 28 decision, Mr. Roe said there are now six states and twenty-one utilities which have moved to intervene in the second-round repository issue. The states include Wisconsin, Minnesota, New Hampshire, Maine, North Carolina, and Virginia. The utilities are all in the East.

On the Siting Guidelines litigation, Mr. Roe said, as Mary Lou Blazek had reported, Oregon had initiated litigation on this issue. They have moved to intervene, and earlier this week a document was entered by the 9th Circuit, granting their intervention.

Federal Legislation

Mr. Roe said there will be two House mark-up hearings and one Senate mark-up in the next two weeks. He said the proposal the Board supported, which is embodied in the Swift-Morrison bill, will be brought to the floor after processing in the House Energy and Commerce Committee. In the Senate, he said it does not appear there will be an early resolution to the deadlock between the Senate Environment Committee and its Chair, Senator Stafford, on the Simpson-McClure bill. It has been reported out of the Senate Energy Committee and now is being reviewed by the Senate Environment Committee. The Committee may report out Senator Stafford's bill, if there are enough votes. Should that happen, he said, there would be two entirely different Price-Anderson bills coming out of the committee.

Other

Mr. Bishop referred to three memoranda from the Attorney General's Office contained in the members notebooks. All refer to personal services contracts, and he asked the Board to review these memos.

Committee Reports

Environmental Monitoring. A written report from the Committee was furnished the Board. Nancy Kirner agreed to defer discussion on their ongoing activities to a later meeting.

Socioeconomic. A written report from this Committee was also handed the Board with agreement discussion be postponed.

Washington State Institute for Public Policy

Max Power of the Institute reported the Institute has continued with their project to have some initial work done by two teams of economic consultants in the state to determine how to define economic risk and potential loss. There should be reports available by the end of this month, with a meeting with some of the Legislative members next month to discuss the reports. He said by September there should be a report from the Institute with some approaches that advance the state-of-the-art and provide a basis for discussion with the U.S. Department of Energy.

Mr. Power said a report had just been received from the printer entitled "Spent Fuel From Foreign Research Reactors", prepared by W.W. McIntosh, their Legislative Fellow. He said it basically points out the cycle of export and import that exists for this fuel and the long-run trends in reducing the proportion of highly-enriched uranium in order to deal with the nonproliferation problem. It makes a few brief points about transportation as well.

These reports are available upon request from the Institute.

Other

Nancy Kirner advised the Chernobyl Report prepared by the Department of Social and Health Services will be distributed to all those who requested it, as well as the Advisory Council and the Board, as soon as it is approved and released by the Governor's Office.

Public Comment

Representative Unsoeld expressed her sincere appreciation for the fine job done by the Chair and staff, particularly during the past week.

There being no further business, the meeting was adjourned.

DSHS CLARIFICATION OF PARAGRAPH 8, PAGE 15 TO
THE MINUTES OF THE NUCLEAR WASTE BOARD MEETING
of June 20, 1986

Dr. Brewer asked if it were fair to say that if there had been no news reports of Chernobyl, nothing DSHS operates would have picked up these increased levels. Mr. Erickson said that the state's monitoring program would have measured the increased levels, but without the advanced warning might have taken several days to initially determine rather than the several hours it took. Dr. Brewer inquired if there were any other national system, or a state or laboratory, that would have picked them up without the news report. Mr. Erickson responded that many agencies including the EPA and DOE have monitoring programs that would have picked it up in their routine sampling in a manner of days. They would also have seen it in the milk pathway; however, some of these are collected on a monthly or quarterly basis. He said there was a great deal of communication between the state of Oregon, DSHS, Battelle, the NRC, and the utilities.

JE/jm

WASHINGTON STATE NUCLEAR WASTE BOARD

RESOLUTION 86-4

July 18, 1986

WHEREAS, on May 28, 1986, Secretary of Energy Herrington and President Reagan approved Hanford for site characterization and announced that the Department had postponed indefinitely site specific work on a second repository; and

WHEREAS, in deciding to postpone site specific activities related to the second round repository process, USDOE acted in direct violation of the Nuclear Waste Policy Act (NWPA); and

WHEREAS, very recently further doubt has arisen in Congress as to the credibility of the USDOE's Implementation of the NWPA by allegations that USDOE has improperly handled documents related to its first round site selection process; and

WHEREAS, the House Appropriations Committee has deleted funding for site specific activities for the second repository program while fully funding the first repository program; and

WHEREAS, such action by the House Appropriations Committee supports the USDOE decision to postpone work on the second round repository; and

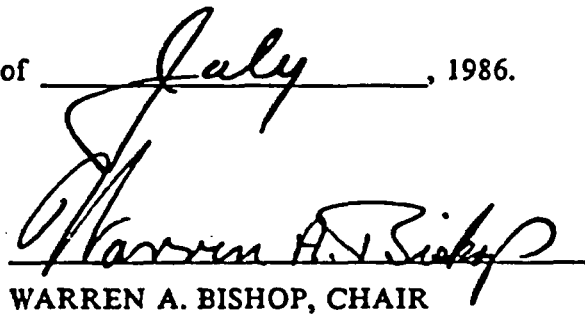
WHEREAS, it is the position of the Nuclear Waste Board that the repository site selection process must be halted and restructured as follows:

- 1. Establish a significant role in the decision-making process for independent scientific and technical groups;**
- 2. Combine the first and second rounds and conduct a nationwide search for the safest repository(s);**
- 3. Eliminate statutory deadlines which virtually all interested parties agree cannot be met;**

NOW, THEREFORE, BE IT RESOLVED by the Washington State Nuclear Waste Board:

1. The Board urges Congress to begin immediately a thorough evaluation of USDOE's management of the high-level nuclear waste management program;
2. The Board urges Congress to withhold funding for all first and second round site specific physical activities, thereby bringing that phase of the federal repository program to a halt until Congress, with fully funded participation by affected states and Indian Tribes, has completed a review of the federal program as it now exists;
3. The Board directs the Chair to transmit this resolution to all members of Congress.

Approved at Olympia this 18th day of July, 1986.


WARREN A. BISHOP, CHAIR