

MINUTES OF NUCLEAR WASTE ADVISORY COUNCIL MEETING

July 17, 1986

2:00 p.m.

Red Lion Inn at the Quay  
Expo Room

100 Foot of Columbia Street  
Vancouver, Washington

Council Members Present:

- Warren A. Bishop, Chair
- Harry A. Batson
- Pam Behring
- Philip Bereano
- Phyllis Clausen
- Nancy Hovis
- Russell Jim
- Dr. Estella B. Leopold
- Valoria Loveland
- Sam Reed
- Robert Rose
- Commissioner W. H. Sebero
- Betty Shreve
- Jim Worthington

WM Record File

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Docket No.

PDR

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From: Dept. of Ecology  
Olympia, WA

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

Introductory Remarks

Mr. Bishop announced that Governor Gardner decided not to call for a special legislative session as originally thought. This information was received from a third party. Mr. Bishop stated that the joint Washington Advisory Council and Oregon Advisory Committee meeting held earlier this morning proved to be an excellent opportunity to meet many of the Oregon people. The first joint meeting was a general get-together, get-acquainted type meeting. Mr. Bishop expressed hope that there would be many more opportunities to hold joint meetings between the two advisory bodies. He suggested that for the next meeting, an agenda with certain elements of mutual concern be developed.

Proposed Resolution

Mr. Reed suggested to the Council that before any action is taken on the resolution, to make the necessary modifications which appear appropriate and relate most to the action that the Oregon Advisory Committee took earlier that day. He stated that changes were made to the proposed resolution and are being presented to the Council for approval and endorsement, and will be sent on for approval by the Board. This statement was made with the understanding that there would be an opportunity for discussion after the motion was approved. The motion by Mr. Reed was seconded by Ms. Leopold and adopted.

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Mr. Bishop then opened the floor for discussion on the resolution.

After a brief discussion on the wording in the resolution, Mr. Bereano made a substitute motion that the draft resolution be revised and presented to the Advisory Council at the conclusion of the meeting.

Mr. Reed presented a modified version of the draft resolution. The motion was defeated by a vote of six in favor and seven opposed.

The substitute motion by Mr. Bereano was seconded by Mr. Sebero and adopted.

Mr. Reed reminded the Council that the Board is the body that takes the action. The Council's responsibility is to make recommendations to the Board. Therefore, the Council, having expressed their concerns in regard to the draft resolution, can rely on the staff to take these concerns and develop a modified motion and present it to the Board. Mr. Reed requested that an explanation of the divided opinions and concerns behind the vote be given in the presentation to the Board.

Ms. Behring recommended that the Council support the spirit of the resolution and whatever amendments that came with it.

Mr. Bishop stated that staff will attempt to capture the spirit of the comments of the Advisory Council in the revision of the resolution and present it to the Board, along with an explanation of the defeat of the original draft resolution.

The motion by Ms. Behring was seconded and adopted.

Ms. Hovis suggested that for future reference the Council should support the motion of the spirit of resolutions and not deal with the revisions. She based this statement on the fact that it is not the role of the Council to take that type of action or to revise resolutions.

Mr. Rose responded by saying that the Council has an obligation to tell the Board what they want done; otherwise the Council would serve no useful purpose. The Advisory Council's motive should be action in order to serve as a viable body.

#### Review of State Comments on the DEIS

Mr. Brewer began the discussion on the review of draft state comments on the Draft Environmental Impact Statement by summarizing events which have lead up to the draft comments, as well as issues of concern to the Board. He distributed copies of the draft report from URS, the technical contractor, to the Advisory Council members. Mr. Brewer stated that comments or recommendations from the Council members will be forwarded to the Board. He referred to two defense waste issues: has the decision already been made to stabilize the waste in-place, and what are the implications on defense waste of postponing the second repository, or eliminating it. He referred to a press release by Mike Lawrence, Richland Operations Manager, which stated that whoever believed the decision has been made to stabilize the wastes in-place is wrong. The question arose, if the state cannot go to the project people at Hanford to get answers, will there be a better chance at headquarters? Concern was also raised on the fact that the DEIS makes no provision for dealing simultaneously and effectively with the large tonnage of hazardous chemical wastes co-located with the high-level radioactive wastes. Mr. Brewer explained that state is still

waiting for an indication that the problem of chemical wastes will be addressed in the Final EIS. If this does not happen, the Final EIS will be a deficient document, said Mr. Brewer. He reported that there has been an update since last month from the Environmental Protection Agency (EPA) on their policy of mixed waste streams, i.e. chemical hazards and radioactive materials. In this reversal of policy, demonstrated by an action taken in the July 3rd Federal Register, the EPA proposed to allow qualified states to take over the responsibilities under the Resource Conservation and Recovery Act (RCRA). This was formerly reserved to the EPA which would deal with waste streams. Under this interpretation, the state would have a much stronger position regarding mixed wastes at Hanford, not just the processed waste in the stream but also in the tanks. Under the Atomic Energy Act, byproducts from the production of weapons materials are protected from intervention and scrutiny from the outside. The USDOE is the sole manager of those byproducts. On the other end, if mixed wastes are put in geologic disposal for 10,000 years, it could not be a concern to national security. There is a point, somewhere between, where mixed wastes are legally classified as byproducts under the Atomic Energy Act and would become mixed wastes under RCRA. Mr. Brewer suggested that the state should propose a point in that process from origination of mixed wastes until geologic disposal where the definition changes over. He said the point might be where the wastes are blended with other wastes and placed into underground storage tanks. Mr. Brewer reported nothing in the DEIS addresses the state's concerns of the ability to monitor the postclosure performance of a deep geologic repository in a near-surface environment dominated by a complex array of radioactive materials originated at or within 100 feet of the surface. Mr. Brewer questioned how Hanford would be monitored if it is chosen as the sole repository for recoverable high-level defense wastes, as well as other facilities. He referred to Appendix M in the DEIS, pertaining to engineered barriers. He made the analogy of an engineered barriers to geraniums in a clay pot. The engineered barriers, he explained, means that the finer grains are saturated first against a barrier of coarse grain material. The layering of materials will tend to capture water until it is saturated and then will release it. Evapotranspiration takes place if the period of retention of those fluids is sufficiently long, and vegetation is on the soil and absorbs that moisture. The process is through the combination of evaporation and transportation by plants.

The floor was then opened for questions and comments on the draft state comments on the DEIS.

Mr. Reed questioned how the comments received by the public would be incorporated in state comments in the response to the U.S. Department of Energy. He also asked how it would be done and by whom. He emphasized the obligation to the people who spoke at the meetings.

Ms. Susan Hall, Hall & Associates, stated that her organization would be compiling the summary report and documenting the comments. She referred to a summary given to the Council members as a quick overview of the meetings, which the staff had requested. She said the verbal comments were taped as well as having notes taken which identify each individual who spoke at the meetings. The written comments will be transmitted, as is. Ms. Hall reported that the intention is to use each category identified in the summary report to paraphrase the verbal comments into questions or phrases which would be in a form that USDOE could respond to. This draft report has been submitted to staff, and Hall & Associates is waiting for direction before continuing the project.

Mr. Reed stated that he, as a Council member, was interested in reviewing the report prior to its release in final form. He said that part of the responsibility as a Council member is to look over the consultant's shoulder and see that the report is done as requested.

Mr. Husseman followed-up on Ms. Hall's comments by stating that the original intention was to hire a court reporter to prepare transcripts. It was then decided to tape the meetings and compile notes on each speaker, the final work product to be a summary of questions and comments on each speaker. Mr. Husseman reported that the next step would be for the Board to review the preliminary draft report from URS, the technical contractor, on technical concerns. He stated that a special joint Advisory Council and Board meeting would be scheduled during the first week of August, either on the 4th or 5th. The purpose of the meeting, he said, would be to review the final proposed submittal of comments to the USDOE. He stated that any changes which are needed will be made and the final document would be submitted by August 9.

Mr. Reed stated that the Council should not receive the comments only moments before they are brought before the Board for approval. Mr. Husseman replied by saying that the comments would be circulated to the Council and Board for review before the meeting on August 4th or 5th. He referred to the USDOE schedule of 120 days the state is required to follow and the 1,000 page document and boxes of reference materials to be reviewed. Mr. Husseman stated that the technical report was only recently received from the contractor. Again, these comments would be given to the Council to review prior to the public meeting during the first week of August.

Mr. Bereano then proposed that the Council utilize the remainder of the time to suggest and debate positions that the Council wishes to take, in response to USDOE's DEIS. That is, to work up reactions for submittal to the Board, or the Council as an independent body.

Mr. Worthington expressed the need to make a strong statement to be delivered from the state to USDOE that there should be cleanup of the defense wastes and that the fourth alternative, which is no action, be totally disregarded.

Mr. Bereano addressed a question to Mr. Bishop as to whether the purpose of the meeting was to make suggestions, debate, and discuss them and make recommendations to the Board. Mr. Bishop answered affirmatively. Mr. Bereano then seconded Mr. Worthington's motion.

Ms. Leopold offered as an amendment to the motion the following statement: "even if it has to be buried elsewhere". This amendment to the motion was accepted by Mr. Worthington and seconded.

Ms. Hovis suggested for future reference that when motions are presented which include amendments, perhaps they could be separate motions to avoid procedural differences.

Mr. Worthington restated the motion as follows: "The state of Washington makes a strong statement to USDOE to cleanup the defense waste as soon as possible, and regardless of where it would be eventually disposed of." This motion was seconded and carried.

Clarification was requested on Mr. Worthington's motion. Ms. Loveland inquired as to if she understood the motion to imply that the Council does not endorse the no action portion of the DEIS and wants action taken regarding defense wastes that now exist at Hanford. Her interpretation of this motion was correct.

Mr. Reed suggested that a general introductory statement be directed to USDOE which says that the Environmental Impact Statement process has not worked in this instance, results will not be as intended, and explain the reason why. Ms. Clausen added that due

to the number of uncertainties, such as facts and figures from USDOE headquarters in Washington, D.C. versus Richland, it is almost impossible to comment as a final statement on the DEIS. She inquired if there was any basis in law for USDOE to release a final Environmental Impact Statement. Mr. Bereano answered Ms. Clausen's question by stating that USDOE is required to address the state's comments, but is not required to follow them. Mr. Husseman replied that the state interprets the law as requiring USDOE to release a supplemental EIS, and, that an opportunity for state and public comment will be offered, before the final decision will be made. He continued by stating that it is the Board's position that USDOE must follow a regulated format for the EIS, and the Council, if it wished, could make an endorsement to the Board on this issue.

Mr. Worthington called for a redraft of his motion. The motion was redrafted as follows: "The Council urges the Board to preface the comments on the DEIS with a strong statement that there must be a thorough and prompt cleanup of Hanford defense wastes based on recovery and treatment, regardless of where the ultimate disposal is to take place. Continuation of present waste management practices is unacceptable." The motion was voted upon as redrafted and adopted.

Mr. Bishop interjected that the motions adopted at this meeting would be typed and presented to the Board on July 18 at the Board meeting. He stated that the motions would be included in the state's final comments on the DEIS. Mr. Bishop suggested that a Council member attend the Board meeting to present the motions to the Board.

Ms. Leopold made a suggestion for the procedure of presenting an individual member's concerns to the entire Council. She suggested that staff respond to the concern, if it has or has not yet been addressed by the Board. She said if the concern has been addressed the item should be withdrawn in order to expedite the process and to be able to address all concerns. Ms. Leopold stated her first concern was climate change; using the past to predict the future. In her opinion, the analysis in the DEIS was an inadequate treatment of climate change. She presented a two-page analysis to Mr. Brewer. Ms. Leopold's second concern was AEC's redefinition of high-level and low-level wastes and the development of USDOE's own definition of wastes. USDOE's definition is a different definition from that of the Nuclear Regulatory Commission (NRC), according to Ms. Leopold. She stated that her concern centered around an article written by Mr. Bill Lawless. The implications are that if USDOE has its own definition for low-level waste, this is a new development and is different from the NRC. Therefore, potential exists for taking high-level waste, redefining it as low-level waste by mixing it with a sufficient amount of gravel and soil to dilute it and storing this mixture as low-level waste. Ms. Leopold expressed her concern about the danger of using this definition.

Mr. Brewer stated that the issue of definitions will be covered in the state comments. He said that in addition to the issue of definitions of high- and low-level wastes, the total level of activity should be addressed. Mr. Brewer reported although definitions can be met, the waste could have total activity in the soil, sediment or water that is of greater concern for public health and safety than a smaller accumulation of high-level waste. Federal agencies, as well as the state, are struggling with definitions of wastes. The basic question is: are the wastes characterized by their place of origin (USDOE's definition) or the physical activity (Oak Ridge's definition). This issue has not yet been resolved.

The state should take a position on definitions regardless of what may happen subsequently, Mr. Bereano replied. The state should decide what is best for the citizens of Washington. He said the state should let its position be known so that if litigation does

occur the state's position will be clear. Mr. Bereano said the state position should be that it does indeed matter where the waste is originated, but in terms of impacts it is immaterial where it comes from.

Mr. Brewer responded by saying that the staff will propose this concern of whether wastes are characterized by the point of origin, or by activity, which includes half-lives and geochemistry, which are not currently covered under origin-based definitions to the Board.

The last item of concern of Ms. Leopold's was a general hope that the staff would take special note of the Oregon Advisory Committee's June, 1986 draft of comments, which included numerous citizen comments. Mr. Brewer replied saying that each sovereign state will respond separately with their own comments to USDOE. He stated that the state of Washington will be issuing many copies of the state's response after the comments have been submitted to the USDOE on August 9. It is inevitable that people would also be interested in receiving copies of Oregon's comments. Therefore, when Washington's comments become available, Oregon's will too.

Ms. Leopold listed four items from the Oregon Advisory Committee's June, 1986 draft comments which she would like the staff to take particular note of.

Item 13: TRU waste disposal requirements: the USDOE change from ten nanocuries per gram to one hundred nanocuries per gram should be better explained or justified. Describe how much of the transuranic wastes will fit the low-level waste category due to this change.

Item 15: The accessible environment should be defined.

Item 21: Worst case scenarios, e.g. health effects.

Item 22: Disposal requirements: the draft EIS should have stated that in no case will a waste form be diluted in order that it may fall under less stringent disposal requirements.

Referring to a USDOE newsletter, Ms. Shreve pointed out a comment by Mr. Roger Gale of the forecast for a decrease in the need for power in the future, therefore eliminating the need for a second repository. In the newsletter it was reported that in the year 2000, the maximum combined amount of defense waste and commercial waste will be approximately 58,000 to 66,000 MTHM. Ms. Shreve expressed her concern about the figures USDOE reported. She wondered what the figures were based on. Mr. Brewer stated that the Office has received the figures, but they have not been analyzed as yet. He said the figures raise questions such as: will the figures fit the problem at Hanford and are the figures legitimate changes in the forecast by the electric utilities? He said that something radical would have to happen to cause such a reduction in the projections. He questioned if the reduction in projections would be solely due to the cancellation or abandonment of nuclear construction projects, or if it meant that existing nuclear power plants would be abandoned before their life expectancy were exhausted. Mr. Brewer stated that these figures are a key issue to the state.

Mr. Bereano noted as a concern that USDOE is handling a number of programs as if they are discrete and separate, whereas they are all interrelated. As a result, one of the problems with the DEIS is that its scope is far too narrow. He stated that the DEIS does not deal with issues that are related to it which come from the repository program, Purex expansion, transportation and nuclear waste reprocessing into warheads; all of which have

significant interactions with the defense waste issue. In his opinion, USDOE's neglect in handling the programs was a reduction approach, rather than a holistic approach. Mr. Brewer responded by saying that from a technical standpoint this was one of the key issues. He said this issue is addressed under systems analysis.

Mr. Bereano continued and expressed his concern that the DEIS was released prematurely. He stated that there is not sufficient scientific and technological information to evaluate the DEIS. Mr. Bereano suggested the state take the position that the entire process is premature and ask USDOE to start over in approximately five years, or whenever the scientific and technological information is available to properly evaluate the options. Mr. Brewer responded by saying that this is a proper Council and Board concern to decide whether or not it is a premature DEIS. Some of this concern is addressed in the resolution, in that there must be a full NEPA review of significant actions. Mr. Bereano stated that the further USDOE proceeds, it marks a sign of acceptance as a suitable DEIS. He questioned that since the geologic repositories have not been characterized, how could impacts be examined by placing any portion of defense wastes in a deep geologic site at Hanford, or elsewhere. He referred to an example: that since the engineered barriers have never been tested or investigated, how could an impact statement explore the impacts of using such barriers. Mr. Husseman replied by saying that this is a divided policy question. There is an agreement, even on the part of USDOE, that there is not enough knowledge to decide how the waste in the single-shelled tanks should be finally disposed of. The state has consistently argued that there would have to be another public process, such as the DEIS public meetings, when the decision is made on these wastes.

Ms. Clausen referred to the Board's draft comments on page 11, issue 6, and the need to reemphasize the importance of this issue. She stated that there should be a complete evaluation of how all four alternatives could interfere with, or prevent, effective technical monitoring of a repository, particularly in the early postclosure years. She explained this was a particular concern, in light of the recent revelation in the USDOE's report that plutonium has been found off-site and, within the last five years, of public exposure to increasing amounts of radiation. Ms. Clausen said that these points speak for the need to monitor the proposed repository indefinitely. Mr. Bishop inquired if Ms. Clausen wanted to emphasize that point in the form of a motion. Ms. Clausen then stated the motion. The motion was voted upon and carried.

Mr. Jim stated that the Yakima Indian Nation had comments on the DEIS and would submit these to the state of Oregon. He addressed a question to Mr. Brewer: is the form of dilution being addressed stringently in the DEIS. Mr. Brewer replied that the issue is not addressed in the DEIS. However, it is a particular concern of the state in the area of postclosure monitoring. He stated another aspect of that issue is the mechanism for reconcentrating it. He said one of those mechanisms is plants, another is fish.

Ms. Leopold referred to the term as biological magnification. She reported that biological magnification is the accumulation of radioactivity which moves up the food chain ending up in the larger fish and in people. She suggested the term might be useful in the wording of this issue.

Mr. Bereano inquired about the extent of the state's position in reflecting any attempt by the Energy Department to do an economic tradeoff of health and safety issues. He also inquired if the state was taking the position of maximum protection of health, safety and environment, irrespective of cost. Mr. Husseman responded saying that one of the criteria for the DEIS was that economic factors shall not be the driving factor, the overriding concern has to be public health and safety. Mr. Bereano requested to have in the state

comments, stated in a positive sense, that the protection of the public health, safety and environment be paramount, irrespective of costs. The statement was made into a motion and carried.

A motion was made that the Department of Energy consider alternative geologic media for shallow disposal, other than sediment types that now exist on the Hanford Reservation. The motion was voted upon and carried. Mr. Bishop stated that all motions will be typed and brought to the Board as proposals for their consideration from the Council at the July 18th Board meeting. Mr. Brewer suggested that the motions be a partial set of minutes of this meeting. Therefore, if corrections are needed, they could be made to the minutes of the meeting.

Mr. Bereano requested in the presentation of the motions to the Board to make it clear that the Council appreciated that many of the items of concern to the Council were already positions the Board and staff have considered. He also stated the Council would not want the implication made that those five motions are the only ones the Council thought important.

Mr. Sebero moved that the Council recess and reconvene on July 18th at 9:30 a.m. in Lacey, Washington. The motion was seconded and passed.

The meeting was adjourned and scheduled to reconvene on July 18, 1986.