

WM DOCKET CONTROL CENTER MINUTES OF NUCLEAR WASTE BOARD MEETING
July 19, 1985

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

WM Record File
101.2

WM Project 10
Docket No. _____
PDR
LPDR

Board Members Present:

- Warren A. Bishop, Chair
- Dr. John Beare, DSHS Designee
- Senator Max Benitz
- Curtis Eschels, EFSEC
- Dr. Royston Filby, Designee, Water Research Center
- Senator H.A. "Barney" Goltz
- Senator Sam Guess
- Representative Shirley Hankins
- Ray Lasmanis, DNR Designee
- Representative Nancy Rust
- Richard H. Watson
- Senator Al Williams

Distribution:
RFB MJB JOB HJM KELL
RDM Dem CER Linahan
(Return to WM, 623-SS) DKunchiro, Reg. 7 of 7
TD: HJM

The meeting was called to order by Warren A. Bishop, Chair.
The minutes of the June 21, 1985 meeting were approved as published.

Status of National Association of Regulatory Utility Commissioners (NARUC) Activities

Mr. Bishop introduced Commissioner Robert W. Bratton of the Washington State Utilities and Transportation Commission. Mr. Bratton reported a Nuclear Waste Subcommittee was established by Resolution of the Ninety-sixth Annual Convention and Regulatory Symposium as a subsection of the National Association of Regulatory Utility Commissioners last November. (A copy of the Resolution is attached.)

Mr. Bratton said the president of the organization appointed four members to serve on this committee: one from Maine, one from New York, the Chairman from Michigan, and Mr. Bratton from Washington State. He said the focus of the committee is to protect the interest of electric ratepayers and to assure that the ratepayers' funds to support the repository program were used effectively. He said their purpose was to monitor the expenditures with the hope the program would be accomplished within the one mill that is being assessed, without substantial cost overruns.

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Mr. Bratton said the committee first met in February, 1985, to express their interest and concerns to the Office of Civilian Radioactive Waste Management directed by Ben Rusche. A subsequent meeting was held in April in an attempt to meet with the appropriate Senate Committee Chairpersons who were not available, but their staff persons were present. The third meeting will be held in July to meet with Roger Gale, Director of the Office of Policy, Integration and Outreach of the Civilian Radioactive Waste Management Office. Plans, he said, are being made to testify at hearings tentatively scheduled in September to make their presence known and to indicate the concern about the collection and expenditure of monies. Also of concern, Mr. Bratton said, was the need for the monies collected to earn interest to sustain the future functions to be performed.

Another area of interest, Mr. Bratton said, was the timeliness of the program. He said in some of the states represented by the committee members there is a significant potential of running out of on-site storage space for spent fuel rods by 1998. Transportation is also a concern, he said, but the primary concern of the committee is to assure that the money is spent prudently to avoid significant cost overruns, so the utility regulators will not be forced to pass along a subsequent rate increase.

Senator Guess said he understood from Roger Gale and others that the MRS program was designed to ensure the federal government could accept the local storage excess if the MRS is on line on the date they anticipate. Mr. Bratton said he was unclear if the Congress will approve the MRS program. He said there was concern among their members whether the facility would be available. He said if it is approved by Congress he was also unclear whether the present funding would cover all of that.

Senator Goltz inquired if the Association had identified any areas of expenditures they questioned as being unnecessary or having fault in one way or another. Mr. Bratton said they had not. He said they were having some difficulty in obtaining detailed data on the budgets. He said they had just had their first exposure to the collections of the monies and they have not seen the timeframes for these monies, nor the assumptions of the investment return, all of which they would need before they could offer any constructive comment.

Mr. Bishop suggested that as information is released by his committee the Board would appreciate receiving it.

Status of Low-Level Compact Process

Elaine Carlin, Program Manager for the Low-Level Radioactive Waste Program, Department of Ecology, reported on the status of the low-level compact process for Lynda Brothers, Assistant Director for Hazardous Substances and Air Quality, WDOE. She said on June 27

Congressman Udall's Subcommittee on Energy and Environment marked up his amendment to the Low-Level Radioactive Waste Policy Act. He reported to the full committee the bill amending the Act, together with consent legislation for the Northwest, Southeast, Central, Central Midwest, Midwest, and Rocky Mountain Compacts. The amendment bill must now go to the full committee for markup, which could be in August or September. She said Congressman Udall has stated that some major issues will require resolution by the full committee. One of the key issues will involve the nature and timing of milestones which unsited regions must meet in the development of sites in order to maintain access and the penalties they will face if they fail to meet these milestones.

Ms. Carlin said the key components of the amendment are contained in Section 5 and include the requirement that the three governors negotiate what wastes will go to which sites; a national cap on volume that the three sites must accept; the milestones and penalties for unsited states and regions; volume allocations for utility generators; and, surcharges which may be imposed on waste accepted from unsited states and regions.

Ms. Carlin also reported that the Northwest Compact held its last meeting on June 26 in Idaho Falls, Idaho. One of the major issues discussed included the three governors' proposal vis-a-vis the Udall amendments as they appeared prior to markup. Also discussed were some of the logistics involved with preparing inter-regional agreements for access and the potential for volume reduction, primarily by utility generators. The mix-waste issue was discussed and the applicability of RECLA (?) to low-level wastes sites. Some discussion was held on emergency preparedness and transportation issues, she said.

Approved at the meeting were the official procedures for contacting the Northwest Interstate Compact, Ms. Carlin said, and they will now be mailed to all fifty governors and the Executive Directors of all the Compacts. Mr. Bishop requested a copy be sent to the Office for distribution to members of the Board.

Senator Guess inquired if Ms. Carlin had an opportunity to look at the calcining process at Idaho Falls, and if so, what progress are they making and what was her reaction. Ms. Carlin replied she was surprised at the scale of the plant as she understood they are reprocessing all of the Navy spent fuel from their nuclear-powered submarines and surface ships. She said she was taken with the amount of granulated material that is currently in storage, requiring ultimate disposal. She said the activity level of a small vial of simulated material was around 700 curies. She added she had quite a bit of literature on that process, which she would be willing to share.

Dr. Filby asked if there were any requirements in the legislation regarding the low-level compact process that change the nature of the mixed wastes taken to the Richland site, specifically such as liquid scintillation wastes. Ms. Carlin said, as she understood it,

there is no language that addresses the mixed-waste issue. Another amendment has been proposed, she said, by a representative from Pennsylvania, which would propose the states shall no longer be responsible for Class C waste. That would become a federal responsibility. That issue will be discussed at the full committee mark-up, she said. She explained of the three classes--A, B, and C--of low-level waste, Class C is the highest activity level and must be handled and packaged in a special manner and must be physically stabilized before disposal.

Dr. Beare asked the nature of the discussion relative to the emergency response. Ms. Carlin said it was very briefly addressed as a future issue. Mr. Dixon, the Oregon representative, brought up this issue and she suggested contacting him.

Public Involvement Report

Anita Monoian, Chair of the Public Involvement Group of the Advisory Council, asked Marta Wilder of the staff to lead the report. Ms. Wilder reported the Board was represented in Spokane at the Association of Washington Counties Annual Meeting by Warren Bishop, where he chaired a panel on nuclear waste. Others on the panel included Senator Benitz, Senator Al Williams, and Curt Eschels. Mike Lawrence of USDOE Richland gave an introductory presentation. A table was set up at the meeting where information on the state's involvement in the program was available.

The July Newsletter has been released, Ms. Wilder said, and copies were available for the public at the meeting. Work is progressing on the August Newsletter and will include a discussion of liability, how spent fuel is stored, site characterization, and some of the highlights of the Mission Plan which has just been received. In the following Newsletter more detail of the Mission Plan will be discussed, she said. A new section will be added in this issue listing frequent questions received with the answers in a column, addressing common concerns of the readers.

A technical slide show is being developed, as there seems to be a demand for more technical information. Dr. Brewer added that the Department of Energy is making available to the Office many of their slides which are difficult to obtain in any other way. They have all been cleared, and he anticipated about fifty technical slides will be available within a week or two.

Ms. Wilder reported there have been limited presentations this month, with three being done for about 100 people. Requests are coming in, however, and some of the requests for presentations include the Yakima Health Board, the Building and Construction Trades Council, the Washington State Labor Council, and the Physicians for Social Responsibility. Gonzaga University has indicated an interest in doing a seminar on nuclear waste in November, she said.

Fact Sheets are being revised, Ms. Wilder said, and include: Understanding Radiation; What is Commingling?; Monitored Retrievable Storage; High-level Nuclear Defense Waste at Hanford; and Repository Impacts on Environmental Issues. It is anticipated this will be in final form and released by the end of August. A flyer is also being developed, containing information on all the aspects of the program. This will be used as a handout for presentations, and will be available in the Office for general use.

Work requests for the next three months with Envirosphere have been finalized, Ms. Wilder said, and include: future newsletters, updating mailing lists, the new flyer, a plan for networking, further Editorial Board meetings, and preparation of a cover design for reports emanating from the Board.

Dr. Filby asked what the availability of the technical slide show would be. He wondered if universities would be able to request a copy. Mr. Provost said a copy of the slide show could be made and if it were desirable to have Dr. Brewer present the show, arrangements could be made. He said it would be advisable to have Council and Board members involved so they could present the slide show with staff assistance available, if desired. Dr. Filby added he had a number of requests for material such as this from faculty at WSU who were teaching courses related to nuclear science and environmental programs. Mr. Provost suggested contacting Dr. Brewer to see what could be arranged.

Committee Reports

Environmental Monitoring

Mr. Provost, Chair of the Environmental Monitoring Committee, reported that at the meeting held yesterday, Mr. Ted Fitzsimmons of USDOE, Richland, introduced the technical staff from Battelle Pacific Northwest Laboratories. Detailed discussions of the monitoring results for on- and off-site areas of the Hanford Reservation, the technical processes used to develop these results, and the procedures used to reach the reported conclusions were discussed.

Mr. Fitzsimmons, in his opening remarks, agreed the meeting was mutually beneficial and thanked everyone involved for the opportunity to make the presentation. He said some of the constructive suggestions will be incorporated in the next issue of the Annual Environmental Report. He gave a bit of background on how the U.S. Department of Energy relates on safety and environmental matters, from headquarters down through and working with their contractors and subcontractors. He said there is a duality in oversight responsibility at all levels within the Department. There is also involvement by the state, EPA, USGS, and other pertinent federal agencies. He continued by stating that the U.S. Department of

Energy orders come out of international standards for radiological safety, drawn up by a very technically competent body. The federal government and the federal agencies have accepted those standards, which are the bases for the safe operations.

Mr. Keith Price of Battelle Pacific Northwest Laboratory was introduced to explain the environmental program and give the results of that monitoring program. His remarks referred specifically to the 1984 Environmental Report, which was provided the members of the Board. A copy of the report is available for viewing in the High-Level Nuclear Waste Reference Center, as well as an outline of Mr. Price's presentation. The summary is attached to these minutes.

In summary, Mr. Price said that the environmental monitoring program has been conducted at Hanford for over 40 years, and the results have been available as annual reports for the last 25. He said he could easily say what is being done is done in a safe and responsible manner.

Mr. Lasmanis asked if the 2 mrem per year of Strontium-90 were the average over the last ten years. Mr. Price said that information is in the document, and felt it was about the same for the last five years or so. During past operations, the dose to the maximum individual would have been considerably more. Since the Purex Plant shut down in 1972, and other facilities have been shut down, there is not the level of work activity at the site. He said he could provide an exact answer if desired. He said it was twice that of last year, due to a doubling of Strontium-90 in the river.

Representative Rust asked that since almost all of the radioactivity is coming from one source, what is being done to reduce that. She said she understood two is very small, but zero is the best. Mr. Price agreed and said they always strive for as low as reasonably achievable. The 100-acre facility is being rebuilt and he understood the new liquid waste disposal facility will be completed later this year. This should produce a drop in the level of Strontium-90 released to the river. Next year's report, however, will probably show a figure similar to this year, he said, but the year following the levels should be less.

In further discussion Mr. Price explained there are limitations to the calculation so the figures this year may not be much different from last year, except the level of Strontium-90 released to the river is larger in 1984 than 1983. Dr. Filby also inquired where the fission products releases shown from the N-Reactor came from. Mr. Price replied if released to the atmosphere they would come from the main stack, but if they were liquid releases, that would be through the liquid waste facility that is being replaced.

Mr. Bishop emphasized the report today was a very abbreviated version of the presentation on the 18th. He urged the Monitoring Committee to promote this kind of session, if possible. Mr. Provost said this would be discussed with the U.S. Department of Energy to see if this type of meeting could be held in different areas of the

state to give this opportunity to others in the state. He said they would try to work out a schedule for such events. Representative Rust expressed her appreciation for a well-conducted and informative meeting with a clear and comprehensive presentation.

Defense Waste

Mr. Bishop reported the grant request is still pending. Mr. Provost said he had word a letter from USDOE was received in the Office today, which has not yet been seen. Mr. Bishop continued that the most recent information was the Environmental Impact Statement on Defense Waste will probably not be available until next spring at the earliest.

Transportation

Richard Watson, Chair of the Transportation Committee, reported the committee did not meet this month. The Energy Office staff is in the process of preparing critiques of the transportation issue papers published by the U.S. Department of Energy. They will be meeting with the Department of Ecology staff next week to discuss the advantages and disadvantages of contracting with an external contractor for a risk assessment of the Hanford site, using the Radtran Model.

Economic Risk

Curt Eschels, Chair of the Economic Risk Committee, reported because of vacation schedules the committee had not met since their previous report. The Waste Board staff is continuing to monitor activities of the U.S. Department of Energy relative to the Economic Damage Assessment.

Socioeconomic

Mr. Bishop reported the Socioeconomic Committee is in the process of being established. Letters have been sent requesting designation of persons to be members of this committee to the following:

Karen Rahm, Secretary, Department of Social & Health Services
Curt Eschels, Chairman of EFSEC
A.N. "Bud" Shinpoch, Director of Revenue
Richard Thompson, Community Development
James Metcalf, Executive Director, Association of WA Counties
Kent Swisher, Executive Director, Association of WA Cities

Mr. Bishop said it had been decided to combine the Economic Risk Subcommittee into the new Socioeconomic Committee, with Curt Eschels serving as the Chair of the new committee. Efforts of the committee will be concentrated on the grants-in-lieu taxes situation. Mr. Bishop said Don Taylor of Revenue had been designated, but the

others had not yet responded. Mr. Eschels stated EFSEC staff could be counted on for support, utilizing past experience to assist the committee. Mr. Bishop said the Board would be kept advised as the committee became fully formed.

Mission Plan

Mr. Provost stated that in April of 1984 the U.S. Department of Energy issued a draft Mission Plan. In August of 1984 Board comments on that plan were submitted. On July 10, 1985, the Mission Plan dated June, 1985 was received. The publication is composed of three volumes: the Mission Plan, Public Comments, and Response to the Public Comments. Mr. Provost referred to the draft strategy for Mission Plan review paper in the members' packets. It is anticipated there will be hearings on this report in Congress in early September, he said. The Nuclear Waste Policy Act allows Congress 30 days to act on this document. It is being recommended that staff and others identify priority issues, which will be reviewed and evaluated by the Board contractor and staff. The issues listed to date include: defense waste, preliminary determination, MRS, transportation, and natural resources, with a staff contact person named for each issue. The contractor's report is targeted for late August, with a Mission Plan Review Committee meeting scheduled at that time to review the report. The testimony would then be prepared for the hearings in September, he said. Final submission of full comments by the contractor would come later in September with another Review Committee meeting to make a report to the Board at the September 20 Board meeting.

Mr. Provost said limited copies of the Mission Plan were received, but should any member be interested in any portion, it could be supplied by the Office.

Senator Guess asked what differences were noted in the final volume from the original draft. Mr. Provost said there was a better description of defense waste, but they maintained their position that they would leave the material in single-shell tanks. As a policy matter, he said, USDOE has stated they will make their preliminary determination of acceptable sites soon after nomination, before site characterization. This constitutes a stronger statement, he said. Also added were whole sections on Monitored Retrievable Storage and Transportation.

Litigation Status

Charlie Roe, Assistant Attorney General, reported in the case of the State of Washington, Nuclear Waste Board v. United States Department of Energy regarding the Siting Guidelines, the brief in reply to the motion to dismiss the case was filed on July 10, 1985. The USDOE motion to dismiss the Board's case on the basis that the case was not "ripe" for review. A copy of the brief is available for perusal in the High-Level Nuclear Waste Management Office, and copies could be made if desired. Mr. Bishop instructed a copy be sent to both the Senate Energy Committee and the House Energy Committee counsels.

Mr. Roe said the Justice Department should reply by the end of the month and if there is oral argument it would probably take place in August, but no later than September.

Mr. Roe added there are now ten pieces of litigation dealing with the subject of Siting Guidelines in which the states are involved. Most have been moved from their original Circuits into the 9th Circuit.

Concerning Nevada's case involving Funding Litigation, Mr. Roe said the case has been set for oral argument on August 12, 1985 in San Francisco.

The Texas case against the U.S. Department of Energy dealing with the selection of potentially acceptable sites was subject to a motion to dismiss also. The 5th Circuit Court did issue an order granting that motion to dismiss the case. Mr. Roe said this could have some impact on the Washington State case, but in the brief filed in the Washington case an attempt was made to distinguish between the two cases.

In the area of Water Rights, Mr. Roe reported no reply had yet been received from the U.S. Department of Energy to Governor Gardner's letter to the Secretary. He understood from one of the attorneys working on the issue that a response should come in August. He said in his discussions with the Justice Department attorney, they were aware their response was past the statutory limitation of 30 days.

Other areas of examination are the Mission Plan, which was just received, and continuation of work on the defense waste issue.

Institute for Public Policy

Max Power, formerly Director of the Joint Committee on Science and Technology of the Legislature, explained the Legislature did not continue this committee, but felt it was desirable to retaining the staff capability to deal with the nuclear waste issue and others. Because the Institute for Public Policy at The Evergreen State College was created for the purpose of providing the Legislature in-depth, substantive support on medium-range issues, it would be appropriate to merge the S&T staff capability with the Institute. He said they had physically moved to the campus.

Mr. Power said he felt this was a good move as it will provide the ability to tap the University resources around the state more directly. It will also provide continuity and stability in the program, he said, and enable them to provide better service to the Legislature.

Mr. Power introduced Mr. Russ Lidman, Director of the Institute, who assumed his new position on July 1. Mr. Lidman said the Institute has only been in existence for two years and its intention is to provide a bridge between the Legislature and the agencies and all of

the four-year schools and universities in the state. The Board consists of six members of the Legislature, two representatives of the Governor's Office, representative from Evergreen, University of Washington, Washington State University, and another representative of another university. All are not yet appointed, he said. Ex-officio members will include the staff directors of the House and Senate. He said the nuclear waste repository issue was clearly one on which they would focus. He expressed his pleasure at having the staff of the S&T Committee join with them.

Senator Goltz inquired if the grant the S&T Committee and the Legislature obtained from USDOE and other sources would be continued under this arrangement with the knowledge and support of the granting agencies. Mr. Power responded in the affirmative, and said they are proceeding to draft an application for federal fiscal year 1986 to continue to support the high-level nuclear waste activity. He said the Legislature was likely to be the recipient and turn the administration of that function over to the Institute. He said both he and Mr. Lidman had met with the U.S. Department of Energy, and they would continue to work with them. He anticipated a grant would be received at about the same level as last year.

Senator Goltz added that the Legislature had created the Joint Committee on Science and Technology and assigned to it by Resolution the responsibility to do the staff research on a joint basis between the House and Senate to give the Legislature the necessary technical background and support in order to make the independent legislative determination on the assigned issues. He continued that, knowing the nature of the Legislature, he suspected that when the Science and Technology staff found its way over to The Evergreen State College, even with legislative blessing, that small distance but large difference in perception, it might create a problem eventually where the Legislature will not feel that it is, in fact, getting service or it is not getting it from its sources. He said he suspected that when the Legislature finally makes that determination someone will surely suggest that a committee should be appointed to make an independent assessment of the facts in order for the Legislature to make an independent judgment.

Status of Oregon Proposal

Mr. Provost reported Mr. Dixon of the State of Oregon had resubmitted a proposal for support to the State of Washington. Discussions have been held with the U.S. Department of Energy on this subject, and USDOE is being more specific in their requirements for a contract. The Office staff is reviewing these requirements and redrafting a proposal to be discussed at a scheduled meeting with Bill Dixon on July 25. He said it was hoped a completed proposal could be made for submission to the U.S. Department of Energy. Mr. Provost asked Mr. Dixon to describe briefly some of the activities his department had been engaged in during the last month.

Bill Dixon, Administrator for Siting Regulation of the Oregon Department of Energy, said in response to Dr. Beare's earlier question about emergency preparedness, Oregon has been spending a great deal of effort over the last year on trying to raise its level of emergency preparedness for transportation accidents involving radioactive material. Oregon has about 2,000 shipments per year of radioactive waste on its highways, with only about five to ten being high-level waste. He said discussions have begun with the State of Washington and the State of Idaho in an effort to develop some sort of cooperative emergency response program should an accident happen close to the borders. He said in reviewing this with other members of the Low-Level Compact Committee, other states indicated an interest in developing such interstate agreements on a more regional basis.

Since the June meeting, Dixon said, his Technical Review Committee, composed of nine state agencies, met on June 27 to review the comments the Board made on the draft proposal and to prepare the proposal for resubmittal. They also discussed how they would allocate any resources received from Washington State to support its effort and began discussions as to how priorities would be established for the work Oregon would like to do in areas where they could make a unique and significant contribution to the issues of mutual concern.

On July 5 a meeting was held with representative of the Umatilla and Nez Perce tribes to begin discussions to see if they had any interest in joining into a coordinated environmental program. They believed this was worth considering, he said, although much more work will be needed in this area. He said the Board would be involved when the Indians are prepared to discuss this further.

The Public Advisory Committee, composed of various groups in Oregon, met on July 8 to finalize their organization, which in May was broken into a Transportation Task Force and a Water Impact Task Force. They are now forming a Steering Committee for that public advisory group, which would provide leadership and direction for the committee.

Only July 9 Oregon representatives were in Pasco to provide some training to the Washington State Utility and Transportation Commission inspectors. This was done by mutual agreement, he said, because of the anticipated shipments of Cesium Hanford expects to make in the near future. It had been decided a joint inspection would be advisable and Oregon offered to provide some training for the truck inspectors.

On Wednesday, July 17, some of the members of the Oregon Legislative Assembly toured Hanford, accompanied by Max Power and Russ Lidman. They were met there by Representative Hankins. They were trying to define a role for the Oregon Legislature in the process as they intend to appoint an interim committee on hazardous material. Part of their charge will be to address some of the Oregon legislative concerns with respect to Hanford.

Work is being done on the Trojan decommissioning, although the operating license expires in the year 2011, Oregon wants to make sure Portland General Electric has sufficient funds and restrictions attached to those funds to decommission when the operating license does expire. Public workshops will be held on this issue on July 30 and August 7.

The Nuclear Regulatory Commission and the U.S. Department of Transportation are sponsoring a conference on the transportation of spent fuel in Chicago on July 31 through August 2, and Oregon will be represented. He said NRC had asked Oregon to assist in a state workshop they plan to sponsor on emergency preparedness on transportation accidents. Another upcoming event is a public workshop Representative Ron Wyden of Oregon would like to hold in Portland on August 5 to determine means to broaden public involvement in Oregon with respect to the Hanford issues. The Western Regional Council of Governments is scheduling a tour and conference at Hanford on August 9 and 10. In conjunction with a representative of the Board they have asked Oregon representative to speak about the cooperative approach that is trying to be developed between Washington and Oregon. He said other states have indicated an interest in a similar arrangement.

Mr. Provost added a letter was received inviting Washington to participate in the meeting at Hanford on August 9 and 10. Arrangements have been made for Senator Benitz to represent the State of Washington.

Dr. Beare inquired about the Oregon proposal submitted following the last meeting. Since much of it deals with monitoring and transportation, he asked if it would be shared with the appropriate agencies before an agreement is reached with USDOE. Mr. Provost said it was planned to distribute the redraft to the involved committees for their input before any final action is taken.

Meeting Summary Reports

Texas and Nevada

Mr. Eschels reported a meeting was held in Carson City, Nevada, with Washington's counterparts in Texas and Nevada: Steve Frishman of Texas, Bob Loux of Nevada with several of his colleagues. The major topic was arriving at a single position to unify the first-round states on the applicability of the Price-Anderson Act solely to waste repositories. This would later be expanded beyond the three states. The meeting followed immediately the testimony Mr. Eschels presented for the Governor as his Special Assistant to the Senate Subcommittee on Energy Research and Development. This is one of the subcommittees, he said, examining the renewal of the Price-Anderson Act. (The testimony and Mr. Eschels' comments were sent to the Board.)

At the Carson City meeting Mr. Eschels said the three first-round states four cornerstones were laid.

1. There would be strict liability of the federal government for any incidents arriving out of the Nuclear Waste Policy Act program.
2. There would be compensation for all of those injured in any way, without a cap.
3. There should be a minimum of red tape for people, governments, and organizations to be compensated for their injuries and damages, if there are any.
4. The states should be held harmless by the federal government for any actions it might take in responding to an incident.

In addition to hammering out this policy, Mr. Eschels said work is being done on legislation to offer to the Congressmen and Senators in the position of leadership on this issue. This is emanating from the Office of the Governor, he emphasized, and is not coming as a Nuclear Waste Board proposal. The Price-Anderson Act does expire at the end of 1986, there is some urgency, although no definite dates for markup have been decided in Washington, D.C.

In addition to the actual language, a single position statement is being worked on that would represent the views of the Governors' offices of the three first-round states, with expansion to other states which do have concerns about nuclear waste--not only in the transportation area, but states such as New Mexico where there is a repository for the defense activities.

Mr. Eschels said he expected to file some testimony next week with the Subcommittee of the Senate Environment and Public Works Committee, which also has jurisdiction in this issue.

Mr. Bishop commented he was anxious to keep the Board advised on this issue, as the lead is being taken in the Governors' Office.

Senator Goltz said considering the press reports on the testimony presented in Washington, D.C. were not particularly favorable, what was the reaction from Mr. Eschels and the Washington State delegation regarding some negative comments by the Washington State junior Senator. Mr. Eschels replied he had gone from Washington, D.C. directly to Carson City, and from there to the County Association meeting in Spokane, then to vacation. For this reason, he said, he missed most of the press reports, so he could not react. At the hearing, he said, he was questioned closely by our state's junior Senator, which he thought was typical of the kind of questioning the Senator would have to ask to be satisfied the testimony being presented and made sense. Mr. Eschels said the questioning revolved around whether liability coverage for waste repositories ought to stand as a separate title within the Atomic Energy Act, or whether it would to be put together with the coverage for nuclear power

plants. Mr. Eschels said the position he expressed was that it should be separate, and the Senator questioned why separate and not be under the same mechanism as nuclear power plants.

In response to Senator Goltz' query about receiving copies of the testimony, Mr. Eschels said that transcript is normally not printed for some time after the hearing. He added that the sponsor of the legislation under consideration, Senator McClure, said a number of times during the hearing that it was his intent that there be unlimited liability for repositories attached to the federal government for any damages that did arise. Mr. Eschels said there was a pledge from Senator McClure and his staff to work together with the states.

Senator Goltz requested that at the next meeting of the Nuclear Waste Board, the agenda include an item of "Federal Legislation". He thought a process should be started to review federal legislation, just as litigation is reviewed each month. He commented he was pleased that Representative Morrison took the initiative to introduce legislation in the House, which Senator Goltz thought responded very favorably to the Resolution which the Legislature passed, and which the Board authorized to be distributed back in Washington, D.C. to the Washington delegation and the National Conference of State Legislatures. He expressed his interest in being kept abreast of the federal bills.

Mr. Bishop agreed with Senator Goltz' suggestion, and said this would be incorporated with perhaps a good discussion of the state's position on this issue at the next meeting of the Board. A second hearing is planned in Washington, D.C. on July 25, and there is a possibility the Governor will be there if his schedule permits, Mr. Eschels said.

Mr. Provost said at the meeting with Texas and Nevada representatives, other issues of common interest were discussed. The State of Washington's Issues Tracking System was reviewed. Arrangements were made for coverage of some other meetings in Washington, D.C. the state would be unable to cover. The agenda for the next quarterly State/Tribe meeting schedule in August was discussed, along with other coordination of efforts and sharing of information.

Mr. Provost stated Representative Markey's House Energy and Commerce Committee oversight hearing on the siting process of the Nuclear Waste Policy Act, which was originally schedule for May, rescheduled for June, has now been scheduled for August 1. The committee is interested in the states' viewpoints on how USDOE has selected the sites and the process they have used. Congressman Swift is on that committee, he said, and testimony will be prepared.

Senator Williams said that considering the Governor, the Legislators, and the Board are invited to testify at federal hearings, he suggested there be coordination between these offices to ensure proper coverage. Mr. Provost added there had been some problems in the past receiving advance notice of the hearings, their subjects

and formats, and that was another item of discussion in the tri-state meeting. It was felt three states working together would have more impact than an individual state, so this coordination will receive more consideration.

Program Decision Schedule - NRC

Dr. Brewer reported a meeting was held on July 15 at Sea-Tac with NRC representatives to discuss the Program Decision Schedule. He explained the federal act calls for a number of formal interactions between federal agencies such as the Geological Survey, EPA, and NRC. It also calls for the Program Decision Schedule which lays out the entire time schedule for the milestones called for in the repository development. One reason is to advise Congress and another is that since USDOE is required, in their interpretation, to make a 1998 schedule, there has to be a means to keep other agencies from prolonging the time. The document, he said, has to be hammered out through negotiations. The NRC is building the states into the Program Decision Schedule by setting up a means of ensuring that the states will have adequate notice of what will happen and where in these milestone decisions. In the packets, he pointed out, is a formal policy for better notification from NRC with their meetings with USDOE.

Mr. Provost said agreement had been made to consult with the Board in order to make official comments on their policy for notifying the states and tribes. He said he thought it was a reasonable approach, and a letter would be sent to Mr. Robert E. Browning, Director of the Division of Waste Management of the NRC in support of their policy. He asked that any comments on this proposal be sent to him at the Office.

Technical Report

Dr. Brewer reported a very important technical development appeared in the final draft of the EPA regulations on the release of radionuclides. Draft No. 7 arrived today, and Dr. Brewer said assurance was given by the consultants working on the document there should be no significant difference between the final draft and the regulations as they are issued. These regulations set the amounts of specific radionuclides that can be released and they also define the accessible environment of the repository. Dr. Brewer displayed a table showing the release limits for containment requirements in curies. He said one gram of radium represents one curie. (See table attached). He said the limits were more restrictive than he had anticipated. They mean that the performance will not be affected so much in a Texas or Nevada site, but would certainly highlight the issue of groundwater movement in the case of Hanford.

Dr. Brewer continued the radius to the accessible environment was moved down to a radius of about 5 kilometers, or three and a half miles from the center of the repository. Ten kilometers had been mentioned before, he said, and it has now become a very tight specification, which limits releases to the 200 West Area. He said

now the U.S. Department of Energy knows where they have to concentrate their efforts and have to characterize rock and geologic structure and geochemical parameters within that tight circle.

Dr. Brewer announced that for the next twelve weeks the Office will have the services of a CEIP Intern, which is a cooperative program between industries, universities, and state agencies. Dr. Brewer introduced Susan Wade, who will be working on the Monitored Retrievable Storage program. Ms. Wade will deliver to the Board an evaluation of what the MRS program means to the state at the end of her internship.

Don Provost added that the Environmental Protection Agency has indicated they will promulgate their regulations in mid-August.

Other Business

Mr. Provost referred to the draft of the summary of the grant proposal for Fiscal Year '86 contained in the packets. A meeting with the U.S. Department of Energy is scheduled to go over the details of each of the seven categories, he said, before the final application is made.

Mr. Provost mentioned the Semi-Annual Report in the packets. Preparation of the next Semi-Annual Report is being done, and he requested input from the Board. He said the next issue will be more streamlined and it is hoped the document can be at the Printer by mid-August. Legislation passed at the last session requires the Board to report on the status of research going on at Hanford, so that will be included, with a general summary of activities in other areas.

Mr. Provost reported the staff had been looking at contractor options such as remaining with the current contractor, going into individual contracts more aligned with specific areas, or seeking another umbrella contract. Evaluation of these options will continue and conclusions brought to the Chair and the Board soon. Mr. Provost said it was felt now is the time to look at the long-range picture, should the state go into site characterization, which would be a five-year process. He thought the contractor decision should run parallel with the Fiscal Year '86 grant.

Warren Bishop advised that the appointments to the Advisory Council will probably be announced shortly. He said the intent was to hold the next meeting of the Council in Richland, preferably on August 21. At this time he said a full orientation would be provided with a tour of the Hanford facility. He said the plan would include having the orientation conducted by qualified outside sources, and it was hoped Mr. Lawrence, Manager of the Richland Operations, would be available to make a presentation similar to the one he made to the Association of Washington Cities in Spokane. Board members would be invited to attend the orientation.

Mr. Bishop said the regular Nuclear Waste Board meetings will continue to be held on the third Friday of the month at the EFSEC facilities.

Ray Lasmanis reported he had been working with a group to identify and develop potential sites for a high-energy particle accelerator, called a Super Conducting Super Collider. Their report was given to the Governor a few weeks ago, he said, and he has endorsed going into Phase 2 of their studies. He pointed out that the press has confused this project with the nuclear industry at Hanford. He cautioned that should the individual members of the Board receive questions from the public they should know the Super Conducting Super Collider is not just another arm of Hanford. Should anyone have specific questions, Mr. Lasmanis asked they contact him.

Public Comment

None.

There being no further business, the meeting was adjourned.

NATIONAL
ASSOCIATION OF
REGULATORY UTILITY
COMMISSIONERS

Resolution No. 8

Resolution Establishing the
Subcommittee on Nuclear Waste Disposal

WHEREAS, The Government of the United States of America decided to promote the use of nuclear fission in the commercial generation of electricity; and

WHEREAS, Such process unavoidably produces high-level nuclear waste and such waste has been produced by commercial reactors since 1957; and

WHEREAS, Many cognizant scientists have concluded that such wastes are most safely disposed of by isolation in facilities in deep geologic formations; and

WHEREAS, Federal programs to develop such facilities have been conducted for more than 20 years; and

WHEREAS, The Government of the United States of America established in 1983, Public Act 97-245, a national policy for nuclear waste disposal; and

WHEREAS, The funding source for the national program is to be ratepayers of all electric utilities employing nuclear power; and

WHEREAS, Assessment for such funding has required the involvement and approval of public utility commissions; and

WHEREAS, The interests of the ratepayer and the responsibilities of commissions are served by a prudent, deliberate and cost-effective program leading to safe and timely disposal of nuclear waste; and

WHEREAS, The national program mandates and the U.S. Department of Energy offers to seek consultation and cooperation from all relevant and concerned institutions; and

WHEREAS, The National Association of Regulatory Utility Commissioners has interest and relevant expertise that must be shared with the directors and overseers of the national program; and

WHEREAS, The National Association of Regulatory Utility Commissioners observes options for improvement in the management, quality, delivery and cost-effectiveness of the national program; now, therefore, be it

RESOLVED, That the National Association of Regulatory Utility Commissioners, assembled in its Ninety-sixth Annual Convention in Los Angeles, California, in accordance with these findings, hereby resolves to discharge its responsibilities with respect to the major national initiative and protect the interests of electric ratepayers; and be it further

RESOLVED, That the National Association of Regulatory Utility Commissioners form a standing Subcommittee on Nuclear Waste Disposal with the following responsibilities:

(1) Investigate and monitor the national nuclear waste disposal program to assure the timely implementation thereof;

(2) Provide to commissioners in all states critical information on the federal program; and

(3) Enable the National Association of Regulatory Utility Commissioners to provide to the U.S. Department of Energy and the Congress of the United States its unique expertise in matters of finance, hearing processes and utility regulation so as to improve the program and assure that ratepayers' funds to support program are used effectively; and be it further

RESOLVED, That it is recommended that this subcommittee be adequately supported by cognizant staff.

SUMMARY

Environmental surveillance activities performed by the Pacific Northwest Laboratory for the Department of Energy's Hanford Site for 1984 are discussed in this report. Samples of environmental media were collected in support of the Hanford Environmental Monitoring Program to determine radionuclide concentrations in the Hanford environs. Radiological impacts in terms of radiation dose equivalents as a result of Hanford operations are also discussed. The results provided in this report are summarized in the following highlights.

Airborne Radioactivity—Gross beta radioactivity concentrations in airborne particulates at all sampling locations were lower in 1984 than during 1983 as a result of declining levels of worldwide fallout. Gross alpha and radionuclide concentrations in the onsite and offsite environs were similar to previous years, with the exception of ^{85}Kr , ^{129}I and ^3H . Slightly higher levels of ^{85}Kr and ^{129}I were noted at several onsite and offsite locations. The sampling location in close proximity to the PUREX plant also detected increased ^3H . All concentrations both onsite and offsite were well below applicable concentration guides.

Water Monitoring—Very low levels of radionuclides were detected in samples of Columbia River water during 1984. Radionuclides consistently observed in measurable quantities in the river were ^3H , ^{90}Sr , ^{129}I , ^{137}Cs , Uranium and $^{239,240}\text{Pu}$. Except for ^{137}Cs and $^{239,240}\text{Pu}$, concentrations of these radionuclides were slightly higher at the downstream sampling site compared to the upstream site; however, downstream concentrations were considerably below applicable concentration guides. The major source of radionuclides added to the river was assumed to be from ground water moving beneath the site into the river. All radionuclides detected in the Columbia River also occur naturally or are present in worldwide fallout.

Concentrations of radionuclides in onsite ponds during 1984 were similar to those measured in previous years in most cases. Elevated concentrations of ^3H in B Pond were attributed to increased discharges of ^3H to the pond from PUREX operations.

Nonradiological Monitoring—The emission of nonradiological pollutants consisted of NO_x and did not exceed EPA and local limits. Nonradiological water quality parameters for the Hanford reach of the Columbia River were within Washington State Water Quality Standards except for a single instance where the pH standard was exceeded. There was no apparent association of this occurrence with Hanford operations, nor any indication of reduced river water quality.

Ground Water—An extensive ground-water monitoring program was performed for the Hanford Site during 1984. The ^3H and nitrate plumes continued to move slowly toward the Columbia River. All ^3H results were within applicable concentration guides. Detailed results of the program will be reported in PNL-5408 to be published later in 1985.

Foodstuffs—Low levels of radionuclides were observed in most foodstuff samples and were attributed to worldwide fallout. There was no indication in any of the samples that radionuclides associated with Hanford operations were present.

Wildlife—Samples of deer, rabbits, game birds, waterfowl and fish were collected onsite or in the Columbia River at locations where the potential for radionuclide uptake was most likely, or at the nearest locations where wildlife samples were available. Radionuclide levels in deer were near those attributable to worldwide fallout. Cobalt-60 and ^{137}Cs were detected in more whitefish samples near operating areas than at locations upstream of Hanford, but the concentrations were similar at both locations. Game birds and waterfowl showed low levels of ^{137}Cs attributable to operations. Low levels of ^{90}Sr and ^{137}Cs typical of previous years were detected in 100 and 200 area rabbit samples. Concentrations were low enough that any radiation dose resulting from consumption of the edible portion of any fish or animal containing the highest observed concentration would be well below the applicable radiation protection standard.

Soil and Vegetation—Low concentrations of naturally occurring and fallout radionuclides were measured in samples of soil and vegetation collected in the Hanford environs. There were

no indications of any geographical differences in radionuclide concentrations and thus no discernible effect from Hanford operations.

External Radiation—Dose rates from external penetrating radiation measured in the vicinity of residential areas were similar to those observed in the previous years, and no contribution from Hanford activities could be identified. Measurements made in the vicinity of onsite operating areas and along the Hanford reach of the Columbia River continued to indicate several locations where dose rates were somewhat higher than those attributable to background sources but were well below applicable radiation protection standards.

Radiological Impact—An assessment of the 1984 potential radiological impacts attributable to the Hanford operations indicated that measured and calculated radiation doses to the public continued to be low, and well below applicable regulatory limits. The calculated fifty-year whole body dose potentially received by a hypothetical

maximally exposed individual was about 2 mrem. This is an increase of 1 mrem over the whole body dose reported in 1983, and was attributed to increased ⁹⁰Sr releases to the Columbia River. The DOE Radiation Protection Standard for whole body dose to the maximally exposed individual is 500 mrem per year. The calculated fifty-year whole body dose to the population living within 80 km of the site was about 5 man-rem as compared to 4 man-rem reported in 1983. These doses are significantly less than doses potentially received from other common sources of radiation. They also can be compared to the approximate 100 mrem and 34,000 man-rem received annually by an average individual and the surrounding population, respectively, as a result of naturally occurring and worldwide fallout radiations in the Hanford environs.

TABLE 1 - RELEASE LIMITS FOR CONTAINMENT REQUIREMENTS
 (Cumulative Releases to the Accessible Environment
 for 10,000 Years After Disposal)

Radionuclide	Release Limit per 1000 MTHM or other unit of waste (curies)
Americium-241 or -243	100
Carbon-14	100
Cesium-135 or -137	1000
☉ Iodine-129	100
Neptunium-237	100
Plutonium-238, -239, -240, or -242	100
☉ Radium-226	100
Strontium-90	1000
Technetium-99	10000
Thorium-230 or -232	10
Tin-126	1000
Uranium-233, -234, -235, -236, or -238	100
Any other alpha-emitting radionuclide with a half-life greater than 20 years	100
Any other radionuclide with a half-life greater than 20 years that does not emit alpha particles	1000

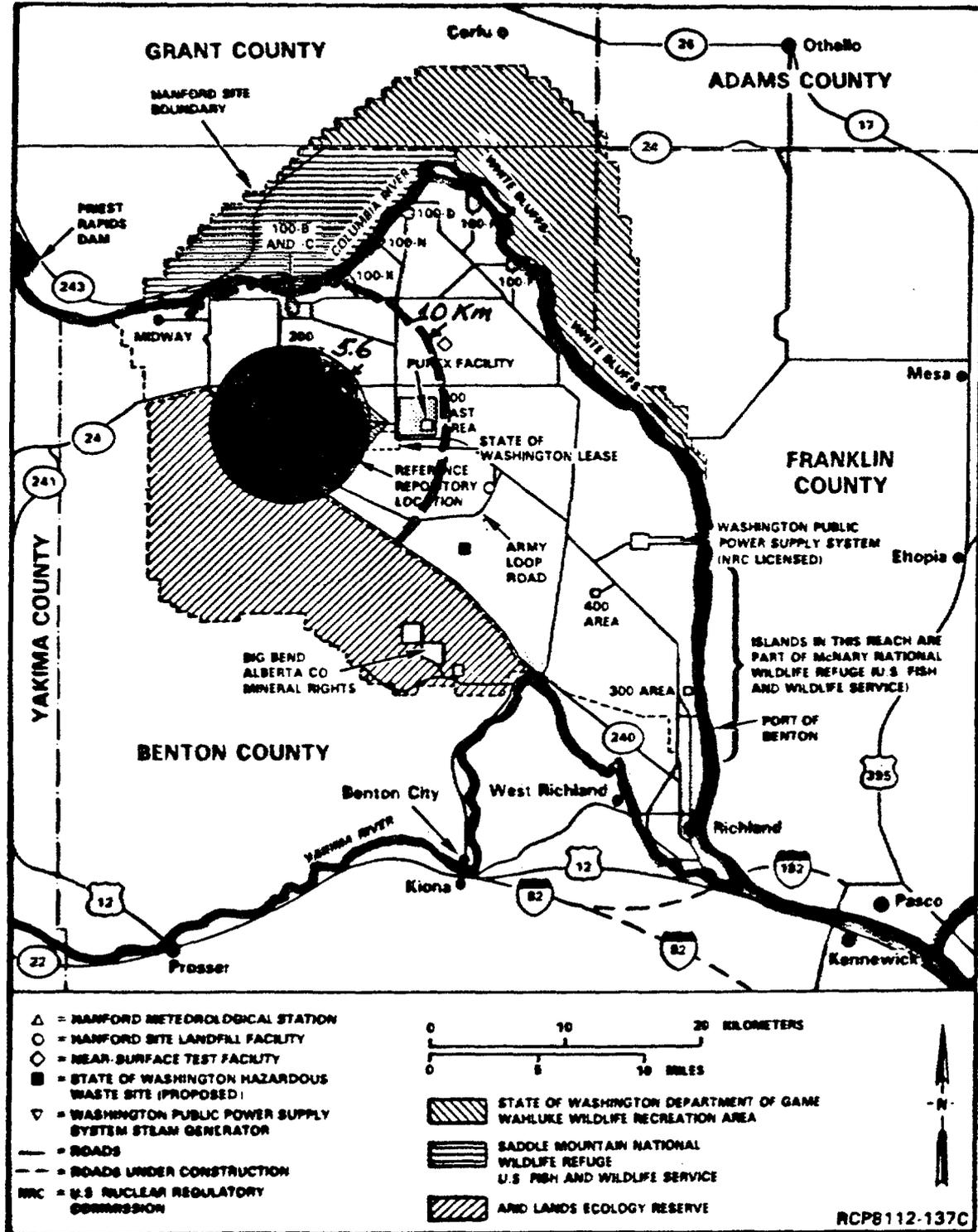


Figure 3-38. Map of the Hanford Site (including land use).

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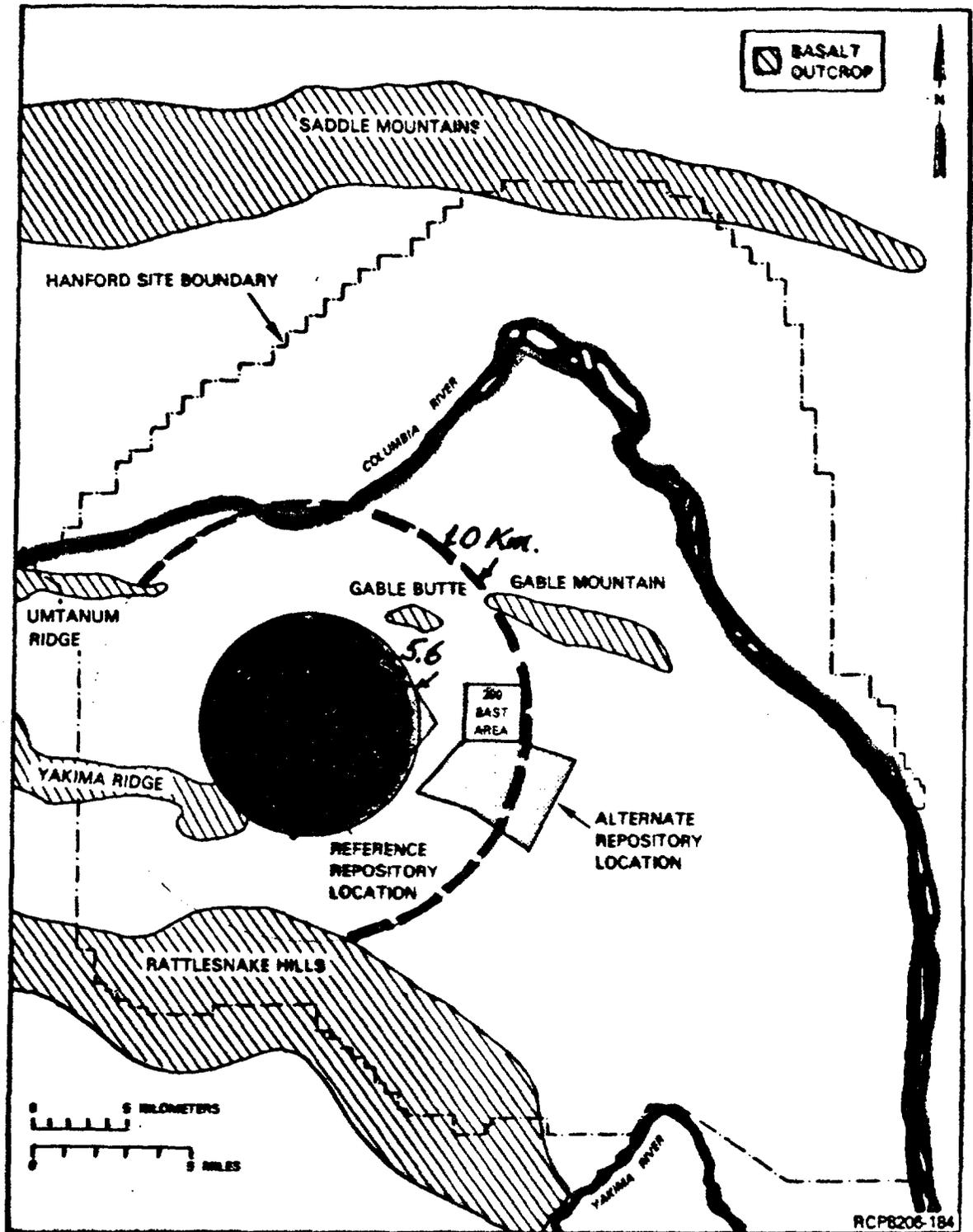


Figure 2-26. Location of the reference repository location and alternate repository location. *DEA 1985*