MINUTES OF MEETING SENATE NATURAL RESOURCES MARCH 11, 1981

The eighteenth meeting of the Natural Resources Committee was called to order by Senator Harold Dover, Chairman, at 1:00 P.M., on the above date in the Scott Hart Auditorium.

ROLL CALL: All members were present. Senator Brown arrived late.

CONSIDERATION OF HB 652:

AN ACT TO REMOVE THE PROHIBITION OF DISPOSAL OF CERTAIN RADIOACTIVE MATERIALS IN THE STATE OF MONTANA ENACTED BY INITIATIVE 84 AND PROVIDING INSTEAD FOR A STATE REGULATORY SYSTEM; PROVIDING FOR THE CONTROL AND CONDEMNATION OF LAND USED FOR DISPOSAL OF MILL TAILINGS FROM URANIUM AND THORIUM ORE PROCESSING; AND TO REVISE THE LAWS CONCERNING RADIATION CONTROL

Representative Conroy, District #58, presented this bill. Initiative 84 originally failed in Montana but the votes were recounted. There was a mistake made in Missoula County and as a result the initiative passed by 416 votes. Thirty-six out of fifty-six counties defeated Initiative 84. Of the legislative districts, fifty-eight out of one hundred defeated the initiative. Initiative 84 shuts down the exploration of uranium in Montana. This bill will allow for the safe disposal of radioactive materials in the state of Montana to allow for uranium exploration in the state. HB 652 will allow the state to develop its natural resources.

Chairman Dover asked for proponents to this bill.

Dennis Lopach, Montana Mining Association, furnished copies of proposed amendments and a statement giving an explanation for each. He advised if there are technical problems with the bill and it is felt it should be placed in a subcommittee, the mining industry will make every effort to work with the agencies to sort it out.

Joe Crosswhite, prior President of Western Environmental Trade Association, supports this bill. Initiative 84 banned uranium mining in Montana and it only passed by a marginal vote. There isn't a mine in Montana that doesn't have some uranium in it. Mr. Crosswhite requests that the committee do pass HB 652.

Bill Hand, Executive Director, Montana Mining Association, gave testimony in support of this bill. Initiative 84 did ban uranium mining and this bill simply sets up the regulatory mechanism to start mining again.

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Sid Groff, State Geologist, said HB 652 is the best alternative to Initiative 84. It certainly is better to go with the nuclear regulatory technical experts than to go with an initiative.

Mac Johnson, Helena, hopes the committee will give this bill their consideration.

George Johnson, ASARCO, supports this bill and believes Initiative 84 is just another way of harassing the mining industry.

The following gave testimony and their written statements are attached: Stephen L. Gash, Manager, Governmental and Environmental Affairs; Maxwell K. Botz, President, Hydrometrics; Jamieson K. Deuel, New Mexico; Michael Donnelly, Vice President, Resource Associates of Alaska, Inc.; and Henry E. Reed, Billings.

Written testimony in support of this bill was furnished by Stanley E. Tichenor, Townsend Star and Marcel Turcotte, Economic Stabilization Corporation.

Chairman Dover asked for opponents to this bill.

Jim Lynch, resident of Missoula, said Missoula County was not the county with the incorrect vote tabulation on Initiative 84 and that Big Horn county did pass Initiative 84.

Mike Males, Environmental Information Center, opposes HB 652. A copy of his written statement is attached.

William Paul Robinson, Southwest Research and Information Center, Albuquerque, New Mexico, submitted a Resume and research papers entitled Radon and Radon Daughters from Uranium Mines and Responsible Uranium Mining and Milling. A copy of these papers are attached. Mr. Males made several points with relation to licensing. He said these points show that the bill, as drafted, has several major problems and will not enable Montana to be an "agreement state" with the federal government, as is proposed by the Statement of Intent.

Bob Mason, former mayor, Gold Hill, Colorado, testified at the request of the supporters of Initiative 84 and on behalf of himself. He submitted a report entitled "The International Uranium Market". The mining industry is going to spend the absolute minimum required to process operations in a manner to produce revenue. That means that the burden of regulation will be heavy on this state, or other states that have uranium operations in process at the present time. The state will be caught holding the bag. His advice was, if you haven't already got uranium mining, don't start now.

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Kay Stricklan, Canon City, Colorado, gave testimony in opposition to HB 652. She furnished the committee with scrapbooks containing pictures and newspaper clippings relating to the uranium mining at Canon City, Colorado. She has lived in Canon City for 25 years, a town which is rich in uranium deposits. The mining industry operates a uranium mine on the outskirts of Canon City. Laboratory studies completed in 1979 gives clear evidence that the wells in the area should not be used for any purposes, including irrigation. Some of the soil cannot be used for gardening The cattle in the area have lost hair and small animals have shown reproduction abnormalities. Colorado is an agreement state. Last fall the Colorado Bureau of Regulations recorded that records were fabricated and the uranium workers have been over exposed for 10 years. The liners in the new tailing ponds are already leaking.

Nancy Swanson, Flathead Energy Council, would like to express outrage that the House of Representatives has chosen not to honor the will of the people who voted in favor of Initiative 84. The decision of the voters must be honored.

Marvin Kammerer, rancher from South Dakota, is opposed to HB 652. He said land and water are abused with uranium mining. The uranium industry is not compatible to farmers and ranchers. The track record of the mining companies' dealings with farmers is not that good. One of the most important industries in this state is agriculture and they have got some votes. In New Mexico, because of uranium mining, the water tables are dropping at the rate of 11 feet a month. In South Dakota there is intensive exploration going on by TVA and uranium companies and the wells in the area are losing their water tables. Tailing dams have broken, contaminating the rivers. The cattle cannot read the signs which say "Do Not Drink the Water". Because of this contamination, ranchers could not sell their livestock. some testing was done on these animals, it was found that the livers and spleens were infected and some other organs. This is contrary to caring for people. For the House of Representatives of Montana to rescind Initiative 84 is a slap in the face to the people of Montana.

Ed Kammerer, South Dakota, lives on a ranch that has been in the family for 99 years and he would like to be there to use water that is not contaminated with uranium for another 100 years.

Mark Mackin, Citizen's Legislative Coalition, gave testimony in opposition to HB 652. A copy of his testimony is attached.

Cindy Elliott, Montana Small Business Association, also gave testimony in opposition of HB 652. A copy of her testimony is attached.

Brad Jones, a Miles City voter, gave testimony against this bill. He gave figures and facts on radon which conflict with Jamieson Deuel's testimony.

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Lil Erickson, daughter of a uranium miner, testified against HB 652. Her father was a uranium miner for 30 years. Her parents are now struggling to make ends meet and also to pay off medical bills. Their only income is social security. The mining industry wasn't responsible enough to provide a health plan or retirement benefits. Eighteen of his longtime mining friends have died from miners consumption. Her father is blind in one eye, can hardly hear and has emphysema. He cannot blow out a match or walk across the room without resting.

Testimony in opposition to HB 652 was submitted by Larry Lloyd, Occupational Health Bureau. A copy is attached.

Material was furnished for the committees perusal entitled "Living with Initiative 84", "Findings on Uranium Tailings and Nuclear Waste Disposal", and "Unresolved: The Front End of Nuclear Waste Disposal." Copies are attached.

Chairman Dover asked for questions from the committee.

Senator Hafferman said that Russia is building nuclear plants and utilizing nuclear power. He asked if we are going to allow the United States to fall behind and fail to fulfull our capabilities.

Jim Lynch said that he despises the government in Russia and does not think our government should follow their example in our nuclear power program.

Senator Etchart said that certain language was deleted on page 7, lines ll through 15, relating to diagnostic or therapeautic purposes. He asked why this language was stricken.

Dennis Lopach said there was some conflict with this language and they felt it was better to delete it.

Senator Manley said that he understood that the reason for this piece of legislation was that supporters of Initiative 84 stated that it did not ban uranium mining and the mining industry said that it did. This bill was introduced to rectify that.

Representative Conroy said that is so.

Senator Manley said then why did we have all this testimony this afternoon.

Senator Ryan asked how many of the people at the hearing had any experience with nuclear power. Approximately 10 or 12 hands were raised.

Senator Van Valkenburg said he is concerned about Agreement State Status. He asked the opponents or proponents whether this bill would give Montana Agreement State Status and what, in effect, is Agreement State Status.

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Dennis Lopach said Agreement Status is the situation under the Atomic Energy Act that allows a state, rather than the federal government, to administer radiation control. The act provides that the federal government regulates unless the state has a regulatory program at least as demanding as the federal government program. This bill is designed to allow the state to provide for Agreement State Status if it chooses to. The bill doesn't impose Agreement State Status, it is there if we decide to do it. If this bill passes, the National Regulatory Commission will continue to regulate.

Senator Van Valkenburg said then this bill is sufficient to enable the state to be put into Agreement State Status.

Mr. Lopach said this bill was not modeled to obtain Agreement State Status. As Mr. Robinson has testified, there are certain problems dealing with procedure that are lacking in this bill. These problems can be solved through regulations by the Department of Health.

Mr. Robinson said there needs to be final regulations before Agreement State Status can be offered. Each license is subject to determination by the National Regulatory Commission before a license is issued to prospect. This must also follow in the state program. The benefit of Agreement State Status is that you get some local control over licensing.

Senator Van Valkenburg is concerned as to what extent we are going to become a dumping ground for other states radioactive waste.

Mr. Robinson said any disposal or dumping of radioactive waste would be subject to licensing, unless is is "midnight dumping". It is necessary to set out licensing requirements more stringent than are proposed in the bill.

Senator Keating asked Larry Lloyd, Occupational Health Bureau, if the state would have the ability to insure safe mining requirements, mining safety or production safety.

Mr. Lloyd said that basically HB 652 does not relate to mining reforms, only to consideration, and our staff would have to be significantly increased for the development of uranium mining.

ADJOURNMENT: The meeting adjourned at 2:58 P.M.

MAROLD DOVER, Chairman

ROLL CALL

NATURAL RESOURCES COMMITTEE

47th LEGISLATIVE SESSION - - 19_{81} Date 3-11-81

NAME	PRESENT	ABSENT	EXCUSED
Harold Dover, Chairman	V		
Mark Etchart, Vice Chairman			
Thomas Keating	V		
Roger Elliott			
Larry Tveit	V		
Jesse O'Hara			
John Manley			
William Hafferman	V		
Steve Brown	cate V1.557	em.	
Dave Manning	V		
Patrick Ryan	V		
Fred Van Valkenburg			

Each day attach to minutes.

HOUSE BILL NO. 652

SENATE NATURAL RESOURCES COMMITTEE

* * * * * * * * * *

1. Statement of Intent, page 1, line 23.

Following: "for"

Strike: "licensing and"

2. Statement of Intent, page 1, line 24.

Following: "purposes"

Strike: "or" Insert: "of"

3. Page 4, lines 4 and 5.

Following: "department"

Strike: "OR DEPARTMENT OF STATE LANDS"

4. Page 4, lines 11 and 12.

Following: "department"

Strike: "OR DEPARTMENT OF STATE LANDS"

5. Page 5, line 6.

Following: "department"

Strike: "OR DEPARTMENT OF STATE LANDS"

6. Page 9, line 25.

Following: "FOR"

Strike: "LICENSING AND"

7. Page 12, line 3.

Following: "ISSUANCE OF"

Insert: "uranium or thorium milling or concentration"

8. Page 16, line 15.

Following: "department-"

Insert: "."

Strike: "OR DEPARTMENT OF STATE LANDS."

DENNIS LOPACH

HOUSE BILL NO. 652

Third Reading Copy

Section by Section Analysis

Section 1. This amendment to the purpose provision of Montana's radiation control statutes explains the Legislature's intent to provide a regulatory program for the long-term control of tailings resulting from uranium and thorium ore processing.

Section 2. The modified definitions of this section are needed to ensure conformity of Montana's statutes with the model state Uranium Mill Tailings Radiation Control Act developed by the staff of the U. S. Nuclear Regulatory Commission. With these amendments in place, Montana is free to pursue "agreement status" with the federal government under the federal Uranium Mill Tailings Radiation Control Act of 1978. Such status would allow Montana and not the U. S. to regulate uranium mill tailings.

The amendment to section (1)(b) of 75-3-103 expands the definition of "byproduct material" to expressly include solution mining wastes.

Section 3. The deletion of (3) eliminates language possibly in conflict with NRC regulations that might pose a barrier to agreement status.

Section 4. Amendment of (2)(c) clarifies the scope of the Department of Health's rulemaking powers.

Section 5. The addition of subsection (9) allows state agencies to defray their costs through assessment of fees for the issuance of licenses and inspection of the operations of licensees. Such fees are to be set at a level sufficient to ensure that there is no general fund impact from the licensing activity.

Section 6. This new provision confers upon the Health Department or the Department of State Lands the power to condemn title to disposal sites following expiration of a disposal site license. Title to the byproduct materials

would also be condemned, but only if this transfer of ownership is required to protect the public's health, safety or welfare.

Section 7. This section requires that the Health Department, and, possibly, the Department of State Lands, develop standards for decontamination, decommissioning and reclamation of tailings sites. Licenses for activities that produce byproduct materials must ensure that these standards will be met before the license expires.

Section 8. If tailings and a disposal site are condemned, the responsible agency must require a surety, or financial guarantee, from the licensee in sufficient amount to allow for full decontamination, reclamation, and, if necessary, long-term maintenance of the disposal site.

Section 9. The exemption discussed in this section applies only to activities conducted by agents of the federal government. The Health Department would monitor these activities inspite of the exemption.

Section 10. The policy section of Initiative 84 is amended to substitute a state regulatory program for the disposal ban.

Section 11. Subsection (1) of this section allows the disposal of byproduct material in Montana if done pursuant to a license issued by the U. S. or the state. the ban on disposal in Montana of large quantity radioactive material produced in other states, first enacted in the "Cooney Bill" of 1977, is continued.

Section 12. This section amends the penalty provision for violations of the disposal statute to clarify that a violation occurs only if no license is issued covering the activity.

Section 13. This section provides that condemnation pursuant to the act is a public purpose for use of the eminent domain power.

Section 17. This section provides that, if the pending executive reorganization bill is approved, State Lands' responsibilities will be transferred to the Department of Natural Resources.

TESTIMONY IN SUPPORT

OF H.B. 652

MONTANA LEGISLATURE

SENATE NATURAL RESOURCES COMMITTEE

MARCH 11, 1981

Stephen L. Gash, Manager Governmental and Environmental Affairs

Marathon Resources, Inc.
One Park Central
1515 Arapahoe Street, Suite 1300
Denver, CO 80202

My name is Steve Gash, and I represent Marathon Resources, Inc., a mineral exploration and development firm headquartered in Denver, Colorado. For the past several years, we have been conducting exploration operations in Carter County, and are evaluating the feasibility of a uranium solution mine in that area. I am a biologist by training, and have 7 years experience in the environmental aspects of energy development in the West.

To assist you in evaluating House Bill No. 652, I would like to briefly review the framework of existing environmental protection statutes and regulations that apply to uranium development in Montana, and to discuss the effect of H.B. 652 on these requirements. It is important to note that enactment of this bill—even if the State does not eventually become an "agreement state"—would reduce no existing environmental protection regulation. There already exists a comprehensive

March 11, 1981

The Honorable Harold Dover Chairman, Senate Natural Resources Montana Legislature State Capitol Helena, Montana 59601

Senator Dover:

My name is Maxwell K. Botz and I reside in Clancy, Montana. I am testifying as a proponent of House Bill 652. I am President of Hydrometrics, which is a consulting firm in Helena, Montana. I am a Registered Professional Engineer in Montana and have worked in Montana for over 15 years on mining and water resources problems. My previous experience includes 6 years as head of the Hydrology Division of the Montana Bureau of Mines and Geology, and 4 years as chief of the technical investigations section for the Montana Water Quality Bureau.

Initiative 84, approved by the general public in November, 1980, has raised a number of problems both in the mining industry and with engineers and environmental scientists in Montana. I have several concerns about Initiative 84 and its status as law in Montana.

My first concern with Initiative 84 is that the summary in the state's voter information pamphlet was misleading in its description of the Initiative's effect on uranium mining in Montana. Page 4 of this official publication stated:

"The proposal does not specifically prohibit the mining of minerals such as uranium. . ."

Initiative 84, whether specifically or not, does in fact prohibit mining of uranium in Montana, as I am sure potential mining companies will testify in this hearing. In my opinion, the voters in Montana were not concerned about uranium mining, but were concerned about the so-called "dumping" of highly radioactive nuclear wastes in Montana. Such wastes could be hazardous to the environment in Montana.

Secondly, the passage of this Initiative stops all development of a potentially important sector of Montana's mining economy without benefit of meaningful public debate and, I believe, with minimal public

Ground Water Development

Geotechnical Investigation

Water Resources Engineering

Mining Hydrology

Water Quality

Water Rights

Senator Harold Dover Page 2 March 11, 1981

understanding of the issues. I would ask the question: How many ordinary Montana citizens could read Initiative 84 and determine its impact? I submit that few citizens would have concluded that Initiative 84 would prohibit uranium mining in Montana. I believe an amendment to allow uranium mining in Montana is entirely consistent with the public attitude and consistent with the citizen desire to protect Montana's environment.

Mining of uranium in Montana can occur by in-situ solution processes or as open pit mines and underground mines. There are existing state and federal laws and regulations that cover uranium mining and provide for protection of the environment. I would like to briefly describe the existing regulatory framework in Montana relative to potential uranium mining.

In-situ uranium mining consists of injection of chemical solutions through wells into the ore bearing zone. These solutions dissolve uranium minerals in the ground and the solutions then are withdrawn from the ore zone by recovery wells. This mining technique is widely used in the western United States for recovery of uranium. This type of mining is completely and comprehensively controlled by the Montana Water Quality Bureau rule entitled, "Montana In-Situ Mining of Uranium Control System (MIMUCS) Permit." This rule provides complete protection for the environment during mining. Insitu mining also is regulated by the Montana Strip and Underground Mine Reclamation Act and regulations pursuant to this act.

Open pit mining and underground uranium mining is controlled under the Montana Department of State Lands Strip and Underground Mine Reclamation Act and by regulations pursuant to this act. Montana rules passed pursuant to this act are in conformance with the U. S. Department of the Interior, Office of Surface Mining, Strip and Underground Mine Reclamation Rules. Montana mining rules are considered to be the most stringent in the United States. These rules cover every phase of underground and strip mining, including permitting, mine planning, reclamation, protection of the environment, protection of water and air quality, bonding and many other factors relative to protection of the environment.

Tailings from uranium mining operations have been a widespread concern. In response to this concern, Congress in November, 1978, enacted Public Law 95-604 entitled "The Uranium Mill Tailings Radiation Control Act of 1978." The purpose of this act is to:

"... regulate mill tailings during uranium or thorium ore processing at active mill operations and after termination of such operations in order to stabilize the control of such tailings in a safe and environmentally sound manner and to minimize or eliminate radiation and health hazards to the public."

Senator Harold Dover Page 3 March 11, 1981

After passage of this act, the U. S. Nuclear Regulatory Commission (NRC) produced a generic environmental impact statement on uranium milling dated September, 1980. The purpose of this GEIS was to assess any potential environmental impacts of uranium milling operations and to provide an opportunity for public participation in decisions on proposed changes in the NRC regulations on uranium milling and tailings disposal.

The GEIS carefully and thoroughly examined the adequacy of existing regulations concerning mill tailings. This effort also recommended revisions of these regulations to assure public health, safety and protection of the environment. The NRC presently is developing comprehensive regulations for uranium mill tailings. These regulations presumably will be implemented by the NRC, and, potentially, the regulatory program could be assumed by individual states as these states develop parallel regulations and demonstrate the capabilities for administering these rules.

In summary, the mining, milling and disposal of wastes from the uranium industry are covered by an existing comprehensive set of laws and rules. The NRC's proposed rules on milling and disposal of wastes are specifically keyed to solving problems that have occurred in the past due to disposal of tailings.

I am particularly concerned about potential impacts of mining and milling on water quality. This is a sensitive issue in Montana and has been identified as a potential problem in uranium developments. I am very familiar with existing water regulations and have, in fact, written portions of these regulations. I am confident that existing Montana Water Quality Bureau regulations will prevent deterioration of groundwater from in-situ mining. Water Quality Bureau rules also will very adequately protect surface waters from uranium mining, milling and tailing storage operations. The Montana Department of State Lands regulations provide for protection of groundwater from strip and underground mining.

Banning of uranium mining in Montana by Initiative 84 appears to be a case of total regulatory constraint - in this case, a ban on mining - with little commensurate environmental benefit. It is my opinion that this is the type of regulatory control that is counter-productive and should be reconsidered by the Montana legislators.

A final concern about uranium mining in Montana is the ability of the state to adequately regulate this activity. I believe the state's stringent regulatory programs for air quality, water quality and coal mining clearly demonstrate Montana's capability for controlling development activities.

Senator Harold Dover Page 4 March 11, 1981

For these reasons, I support House Bill 652. Thank you for the opportunity to comment on this issue.

Sincerely,

Maxwell K. Botz

President

MKB/sas

HOUSE BILL NO. 652

Statement of Jamieson K. Deuel Concerning

Low Level Effects From Uranium Mill Tailings

My name is Jamieson K. Deuel. I am a member of Deuel and Associates of Albuquerque, New Mexico, specialists in environmental licensing and permit management. I have been asked by the Montana Mining Association to testify in support of House Bill No. 652 by offering some observations on health effects of uranium tailings.

My educational and professional background includes a broad range of experience relative to nuclear science. I am a graduate of the U.S. Naval Academy (1954), and a retired Commander from the nuclear submarine fleet. I have nine years of graduate nuclear engineering experience. Additionally, I hold an advanced degree in business (MBA - management).

From 1975 - 1977 I was Senior Engineer for Ranchers

Exploration and Development Corporation. Deuel and Associates

was formed in 1977. In May, 1980, I was elected President

Environmental Reclamation Managers, Inc., a Colorado corporation,

specializing in uranium mill tailings disposal.

In recent years I have delivered numerous technical papers at professional meetings, and have appeared before Congressional committees as an expert witness on environmental matters.

RESOURCE ASSOCIATES OF ALASKA, INC.

TESTIMONY IN SUPPORT OF HOUSE BILL 652 PERTAINING TO DISPOSAL OF RADIOACTIVE WASTES MONTANA LEGISLATURE--SENATE COMMITTE ON NATURAL RESOURCES

Dr. Michael F. Donnelly
Vice President
Resource Associates of Alaska, Inc.
5926 McIntyre Street
Golden Colorado 80401

March 11, 1981

HOUSE BILL NO. 652

TESTIMONY BEFORE THE SENATE NATURAL RESOURCES COMMITTEE March 11, 1981

I am Henry E. Reed of Billings, Montana. I am Director of BurWest, a joint venture of Burlington Northern and Westinghouse operating primarily in the states of Washington, Idaho and Montana for the purpose of finding and developing uranium deposits.

BurWest has spent approximately \$5 million in exploration since 1975, over half of which has been in the state of Montana. During that time we have found important occurrences of uranium which deserve further exploration and evaluation to see if an ore deposit exists. During 1980, BurWest intended to spend about one half million dollars in exploration in Montana. In addition we had a potential joint venture with a third party which could have generated several hundred thousand additional dollars for exploration in Montana.

When Initiative 84 qualified for the ballot, BurWest pulled out of Montana, abandoned its projects and did only clean-up work. We suspended work in the Townsend area where a drilling contract had been issued. Following the apparent defeat of Initiative 84, we returned to the Townsend area and began drilling, only to have the official canvass reverse the verdict, whereupon we abandoned the project.

3/11/81

(406) 266-3333 Drower M TOWNSEND, MONTANA 59644

Re: Uranium Initiative

During the period preceding the note on Initiative 84, summerous discussions were held atour Toronsend Chamber of Commerce meetings. It was generally decided by the membership to oppose the initiative on the grounds that it was ill conceived and not in the best interests of this state.

We felt that the 'fear' of radioactivity was the only strength for passage of the initiative and all facts tended to favor its defeat.

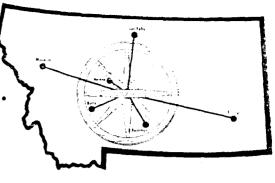
The legislature of Montana should take this opportunity to change the direction of the measure to meaningful treatment of radioactivity rather than depend on concepts of fear."

I feel that our elected legislator are in a position to receive facts regarding radioactivity and uranium, and can make a decision based on facts rather than depend on the unsound passage of I84.

Succeely, Stellerson Tichenor

ECONOMIC STABILIZATION CORP.

P. O. BOX 96 . TOWNSEND, MONTANA 59644



Montana State Legislature Montana State Capitol Building Helena, MT 59601

RE: HB652

Dear Senators:

I am representing the Economic Stabilization Corporation of Broadwater County. My group would like to see a workable solution found to the problems caused by Initiative 84.

Broadwater County has not only lost a projected \$250,000 in uranium exploration but also the financial benefit that would occur if exploration for the ore were successful.

Broadwater County has lost this potential benefit in the name of "preservation of our environment". My group feels that the environment is adequately protected by the State Department of Health and the Environmental Protection Agency without doing away with the beneficial effects of uranium mining.

For these reasons, the Economic Development Corporation of Broadwater County supports House Bill 652.

Sincerely.

Marcel R. Turcotte

Vice President

TESTIMONY OF THE MONTANA ENVIRONMENTAL INFORMATION CENTER AGAINST HB 652 Senate Natural Resources Committee, 11 March 1981

EIC is opposed to HB 652. We strongly dispute the proponents' claim that 652 is some kind of "compromise bill." This bill is no compromise. It's the uranium industry's own terms, with the minimum requirements on the industry and the maximum liabilities for Montana.

HB 652 was rushed through the House without any debate whatsoever on what the bill actually does. The debate was centered around whether Ed Dobson is on food stamps and whether Montana voters were temporarily insane when they voted for Initiative 84. Rep. Mike Keedy asked the House Natural Resources Committee point blank: "Can anyone who favors this bill tell me what the advantage is to Montana's adopting a state regulatory program for uranium mining." Not one representative could answer that question. The House floor debate showed that the overwhelming majority of that body did not know what the bill does.

That's no climate for passing legislation, and we ask this committee to take a long, hard look at this bill. There are a number of good reasons why HB 652 should be hung out to dry, and they all point to the question, "What's the rush?"

- (1) HB 652 sets up a regulatory scheme which entails unknown costs and obligations by the state of Montana. The sponsors of this bill claim it would enable Montana to become an agreement state and regulate uranium mining ourselves. It's not clear that the language of HB 652 is sufficient for the state to negotiate agreement status with the federal government. If it isn't, then the effect of HB 652 is to submit the state to across-the-board federal regulation.
- (2) Federal regulation of uranium mill wastes is a proven failure. The U.S. Department of Energy recently estimated, after \$8 million worth of study, that cleanup and stabilization of 22 uranium mill tailing sites in western states would cost between \$400 and \$600 million. That's \$20-30 million per site. The D.O.E. also estimated that cleanup of the Vitro site in Salt Lake City would cost \$180 million. Despite the fact that uranium has been mined for 30 years, no uranium

tailings pile has yet been reclaimed to federal standards.

- (3) If Montana eventually becomes an agreement state, we would have the choice of adopting federal regulations or setting our own. Federal regulations, such as they are, have been taken to court by the uranium industry and may not be clarified for years. We have no idea what these regulations will be. If we adopt independent state standards, that means a hearing and regulation-setting process, backed by state studies showing the need for the different standard. If the companies took the federal government to court, they will surely take any more stringent state standards to court. HB 652 would force Montana into this dilemma in which neither of the choices is good.
- (4) The costs and obligations of state regulation are unclear. Agreement status means the state has to establish a program compatible with federal regulations and timetables. The fiscal note for HB 652 estimates \$80,000 to consummate agreement status. After that, the state would be entitled to collect license fees for licensing mining operations. Right now, the federal Nuclear Regulatory Commission estimates that license fees cover only 12% of the \$500,000 per license program costs.

 That means Montana loses over \$400,000 for each license it grants.
- (5) The costs of agreement programs in other states appear to be large. Recently the director of New Mexico's Environmental Conservation Agency testified that the costs to the state of its agreement program are \$1 million per year. That's particularly disturbing, because New Mexico's program has been cited by the N.R.C. as deficient and needing more "scientific management." A recent dam failure flooded 50 miles of river in New Mexico with 97 million gallons of radioactive water from mill waste impoundments. The N.R.C. has also cited agreement programs in Texas, Washington, and Colorado as deficient.
- (6) The costs of HB 652's regulatory program, though it may cost the state hundreds of thousands of dollars per year, are small potatoes compared to the long-term costs of managing uranium tailing wastes. For mill tailing sites licensed by the federal government, federal agencies are responsible for the hundreds of millions

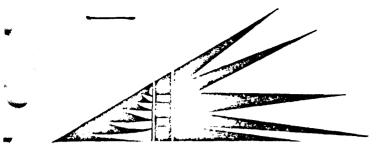
of dollars needed to clean up a few of the dozens of abandoned uranium mill tailing sites in the west. If Montana licenses uranium operations, we will get the tab for any mistakes. IB 652 ostensibly allows the state to collect a surety bond from licensees to cover long-term costs, provided that the state program with a couple of employees can estimate the cost for a long-term tailing-site reclamation and surveillance program (which has not yet been done anywhere) which will take place decades in the future, including allowances for future inflation rates, contingencies, unanticipated costs, federal requirements, failure of financial institutions holding the surety, long-term maintenance, and any number of costs the federal government with all its resources has been unable to predict. These costs will all occur after the uranium company has left the state, and history shows no uranium company has ever reimbursed the taxpayers. An underestimate of just a few percent would leave future Montana taxpayers with tens of millions of dollars in liabilities for cleanup of radioactive sites. HB 652 would impose this burden on Montana at a time when no agency of the federal government or any state has a handle on the costs.

These are no small problems. Pit and underground uranium mining typically brings uranium ore up from hundreds of feet underground to the surface and concentrates the wastes, which still contain 85% of the radioactivity present in the ore, in centralized piles covered with only a few feet of fill. Radioactive thorium in these wastes has a half-life of 80,000 years. No wonder that the General Accounting Office called such wastes "a problem of centuries;" or that Dr. Walter Jordan, of the government's future nuclear laboratory at Oak Ridge, stated that "deaths resulting from the mining of uranium necessary to fuel a single reactor for a year can run into hundreds;" or that N.R.C. Commissioner Victor Gilinsky has said, "Uranium mill tailings are the greatest single hazard in the nuclear fuel cycle" because of their immense volume and difficult manageability.

(7) The United States has made no decision about nuclear power's future. Right now, nuclear power supplies only 3% of our national energy needs despite the fact that it has received over \$20 billion in federal subsidies. Even nuclear optimists

admit nuclear power will never supply more than 15%. Nuclear power is hardly critical to our energy future, and Montana's uranium is hardly critical to nuclear power. Due to the cancellation of 49 nuclear plants since 1976, there is a glut of uranium available. The price has fallen 40% in two years, uranium mines have closed in Wyoming and New Mexico, and Kerr-McGee has virtually ceased exploration. There's no rush to mine in Montana.

(8) The passage by Montana voters of Initiative 80 (in 1978, by a 65% margin) and Initiative 84 in 1980 have given this state a unique opportunity to study and benefit from the problems in other states, to allow current court challenges to go through the courts, and to get a grip on what kinds of short- and long-term costs and benefits the nuclear industry entails. There is no need for the legislature to panic and rush to accept the industry's first offer. We may find that the large amount of money HB 652 would have us spend on the uranium industry could be better spent developing a cleaner and more efficient wood stove, which would provide more jobs, stimulate a local industry, and create fewer long-term liabilities. Montana has a good policy in accepting industries only on our terms. HB 652 has been drafted and considered in an atmosphere of near-total uncertainty by this legislature, and we urge your rejection of this bill and its bad bargain for Montana.



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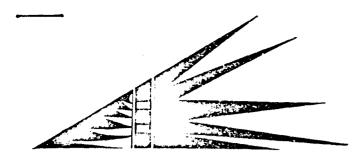
RADON AND RADON DAUGHTERS FROM URANIUM MINES: SOURCES, IMPACTS AND CONTROLS

by

Wm. Paul Robinson October 1980

presented at

3rd Symposium on Uranium Mill Tailings Management
Colorado State University
Fort Collins, CO.
November 24-25, 1980



SOUTHWEST RESEARCH AND INFORMATION CENTER

RESUME: WM. PAUL ROBINSON

BIRTHDATE: April 14, 1953 Resume as of: July, 1980

EDUCATION:

-M. Arch. (all but Thesis)

-Presently enrolled in University of New Mexico, School of Architecture and Planning, Master of Architecture Program, emphasis in Environmental Design. (Coursework emphasizes analysis of natural and modified water systems including irrigation diversions, natural systems and urban flash flood channels and geology.)

Graduate Work:

-Environmental Engineering - John Hopkins University. (Coursework included water pollution chemistry and water resource engineering.)

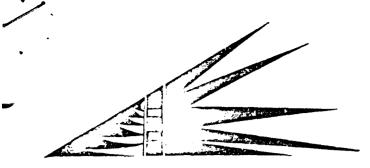
B.A. :

-Anthropology, Washington University, 1974. (Coursework included geology, technology assessment and ecology.)

EXPERIENCE:

August, 1976 - Present:

- -Environmental Analyst, Southwest Research and Information Center. Work involves technical investigations of the use of natural, human and community resources in New Mexico. This includes:
- -Environmental Impact Analysis;
- -Water, land and resource use, assessment and planning; Testimony before decision-making bodies on Federal, State and local levels:
- -Working with community groups providing technical support on air, land and water issues;
- -Technical research for Center legal proceedings;
- -Applications of alternative energy solutions to urban and rural living situations:
- -Sediment transport and trace element dispersion analysis;
- -Groundwater and surface water discharge and withdrawal monitoring;
- -Technology assessment studies of mining developments;
- -Workshops on groundwater impacts, uranium industry growth and waste water management, mining regulations.



SOUTHWEST RESEARCH AND INFORMATION CENTER

RESPONSIBLE URANIUM MINING AND

MILLING: AN OVERVIEW

PRESENTED AT THE

FIRST INTERNATIONAL CONFERENCE

ON

URANIUM MINE WASTE DISPOSAL

VANCOUVER BRITISH COLUMBIA, CANADA
MAY 19,20, 21, 1980

bу

William Paul Robinson Southwest Research & Information Center P.O. Box 4524 Albuquerque, New Mexico 87106 (505) 242-4766

THE INTERNATIONAL URANIUM MARKET

Thomas L. Neff and Henry D. Jacoby

MIT Energy Laboratory Report No. MIT-EL 80-014

December 1980

The Energy Laboratory
in collaboration with
The Center for International Studies

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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MARK INACKIN



CITIZEN'S LEGISLATIVE COALITION

P.O. Box 4071 Butte, Montana 59701

TESTIMONY ON HE652 GIVEN BEFORE THE SENATE NATURAL RESOURCES COMMITTEE ON 3-11-81

When an initiative is passed by the public, it becomes a statement of public policy for the state of Montana. The legislature has the power to change initiatives, but should do so only to correct a flaw or make the initiative function properly. HB652 does not pretend to make corrections in I-84. It acts to reverse the intent of both I-84 and I-80.

The legislature has taken this action without any independent analysis of the provisions of I-84 that would tell it what I-84 really does, whatever the claims of its proponents and opponents. This premature action has been taken because of a polarization of opinion on the part of the legislature that has nothing to do with the content of this bill.

The issue has become one of pro-nuclear advocates versus anti-nuclear advocates. Growth-at-any-cost extremists: are using this bill to prosecute a vendetta against environmental extremists whom they see as threatening their financial interests, en-irresponsible use of public office by any standard.

But what happens when the corporations have stripped out all the wealth and left, with their environmental counterparts tagging along? The real Montanans who got caught in the middle of this struggle will be the ones to pay the price.

Passage of IIB652 has been justified by incessant complaints that the voters were donfused about I-84 and did not know what they were doing when they voted on it. CLC believes that there is an excellent case to be made that the voters did know what they were doing, both when they signed the initiative and when they voted on it.

I refer to the ballot title of the initiative as prepared by the Attorney General.

There was no challenge to this ballot language by the opponents, despite their claims all through the campaign that it was inaccurate and misleading. Why? Because the title is accurate and the initiative does what the title describes, no more and no less.

It was not challenged by the opponents, not because they lacked resources, but because to have the title found accurate by a court would have damaged their campaign strategy.

In an initiative campaign, the proponents and opponents attempt to control the issue upon which the decision is made.

When I-84 qualified for the ballot the issue was radioactive waste.

According to a poll released by Larry Williams in the 2nd week of September, 1980, of persons responding to the question are you for or against :: banning disposal in MT of all radioactive waste not already banned, 66% were for, 27% against, and 7% undecided.

Opponents to I-84 then spent over \$100,000 on a multimedia campaign to change the issue to " for or against banning the mining of uranium in Montana". They succeded in convincing mahy Montanans that I-84 did ban the mining of uranium, and created doubt among the rest. the opponents controlled the media and most of the editorial columns. I-84 was fought on the issue of "to ban or not to ban uranium mining in MT". It won.

So now the legislature is rushing to overturn this decision.— to correct the actions of af a confused and weakminded electorate.

But why the rush?

As a result of the passage of I-84-Has unemployment increased by several percentage points?
Have entire communities dried up and blown away?
Is the states' economy crumbling?
Has the public demanded this action?

No, the public didnt demand this bill. One industry, the smallest part of one industry, has demanded this bill, and backed its demand with economic threats.

IB652 has given the legislature an excellent opportunity. An opportunity to chastise the public, not for their supposed ignorance in deciding for I-84, but for its truely appalling ignorance in failing to recognise who really calls the shots in this state.

The legislature can send a message, not just to Montanans, but to the corporate capitals of Denver and Dallas, that the Montana Legislislature does not belong to the public, but is instead the proper servant of the energy companies.

VOTER
INFORMATION
FOR
PROPOSED
CONSTITUTIONAL
AMENDMENTS

REFERENDUMS

INITIATIVES

General Election November 4, 1980

Prepared by FRANK MURRAY, Secretary of State, pursuant to Section 13-27-401, Montana Code Annotated

Livingston Enterprise, Livingston, Mont.

MONTANA SMALL BUSINESS ASSOCIATION 309 So. 10th St., Bozeman, MT. 59715

FOR TESTIMONY ON HB-652

Presented to the Senate Natural Resources Committee March 11, 1981

The MONTANA SMALL BUSINESS ASSOCIATION, a state-wide organization of small business people, believes that passage of HB-652 would severely hurt Montana business and jobs. We strongly urge all legislators to vote against this bill, for the following reasons:

- 1. To date, no degree of "regulation" has successfully solved radioactive waste disposal problems. Serious health and property damages can be associated with nearly every established disposal site.
- 2. The MSBA believes that allowing radioactive residue to accumulate in Montana-- regardless of how well it is regulated-- will create a negative business climate. What business would want to locate, or expand, in an area contaminated by radioactive residue? Montanans are working hard to attract more business and industry to our state. Establishing radioactive waste disposal sites in Montana will only give potential new industries a good reason to avoid us.
- 3. Insurance against damages from radioactive contamination cannot be obtained at any price. Every insurance policy covering businesses, homes, autos, and property contains a clause exempting insurance companies from such payments. No Montana business can afford the costs of radioactive contamination clean-up and property de-valuation.
- 4. Under the Price-Anderson act of 1957, the millions and billions of dollars needed to clean up after an accidental "leak" or accident would likely require huge federal subsidies. The less Montana depends on such subsidies the better.
- 5. The argument that passage of HB-652 would create permanent jobs must be examined carefully. It seems that counting on this industry for permanent jobs is a mistake.
- * New Mexico, the nation's chief producer of uranium yellowcake for nuclear power plants, is suffering from 20 percent unemployment among

its uranium workers, as a halt in nuclear power growth closes more and more mines. Bill Darmitzel, head of the New Mexico Mining Association, has told the <u>Wall Street Journal</u> that "the industry is in a complete state of collapse." A total of 500 workers have now been laid off at uranium mines in the Jeffrey City, Wyoming, area. Montana's economy cannot absorb similar massive layoffs.

*Moreover, the uranium industry is a <u>capital intensive</u> -- <u>not</u> a labor intensive -- industry that would would create relatively few jobs. Why trade a few new jobs in an unstable industry for a contaminated environment, that in turn would scare off badly needed labor intensive industries? The MSBA believes this is a trade-off Montana cannot afford.

- 6. Passage of HB-652 could pose an incalculable threat to Montana agriculture. What will happen to our agriculture industry when crops and livestock supported by contaminated water supplies are judged unfit for consumption?
- 7. According to the Old West Regional Commission's 1980 portfolio on Montana, "clear, fresh water is one of the great natural resources of this region. Some of the largest underground water supplies in the nation are located here." One or two accidental leaks from future radioactive waste disposal sites into our ground water tables, and the Old West Regional Commission will have to re-write this page of their industry brochure.
- 8. Finally, by allowing radioactive waste disposal, HB-652 constitutes an outright repeal of Initiative 84. The Initiative clearly prohibits disposal.

The MSBA supports the initiative process because we believe it gives small business people a chance to get involved in the lawmaking process, as most of us normally have neither the time nor the financial resources to lobby at the legislature.

The people of Montana were given a chance to decide on this issue, and they chose to pass Initiative 84. We credit the people with knowing what they were voting for. Initiative 84 was not misleading. The decision of Montana voters must be respected.

Department of Health and Environmental Sciences

Testimony to the Senate Natural Resources Committee on HB 652

Prepared by Larry Lloyd Occupational Health Bureau 449-3671

Numerous technical questions and problems exist in HB 652. Major problems exist in Section 11. Some of the problems identified are as follows:

Page 16, lines 10 through 15

"(1) No person may dispose of large quantity radioactive material produced in Montana, byproduct material, or special nuclear material within the state of Montana except as authorized by a license issued by the United States or by the department."

Comments:

- 1. The prohibition of disposal of "large quantity radioactive material" except as licensed conflicts with existing rules which regulate the disposal of any quantity of radioactive material.
- 2. "Radioactive material" is not defined in HB 652. Radioactive material as defined in the U. S. Department of Transportation regulations (49 CFR 173.389), where "Large Quantity Radioactive Material" is defined is much different than definitions used by the U. S. Nuclear Regulatory Commission and by the Montana Department of Health and Environmental Sciences.

Page 16, lines 15, 16 & 17

"No person may dispose in Montana of Large Quantity Radioactive Material produced in other states, . . ."

Comments:

- 1. All radionuclides used in Montana are currently produced in other states.
- 2. Does "Large Quantity" refer to:
 - a. radioactivity contained in a single shipment or disposal?
 - b. radioactivity contained in multiple disposals by a single. licensee?
 - c. radioactivity contained in multiple disposals by multiple licensees?

- d. "Large Quantity" produced in a single "other state"?
- e. "Large Quantity" produced in multiple "other states"?
- 3. Will there be allowance for radioactive decay? Some radioactive materials used in nuclear medicine and disposed through the sanitary sewer system have half-lives ranging from only a few hours to a few days.
- 4. If "Large Quantity" means total accumulated activity at the time of disposal, HB 652 would eventually eliminate the practice of nuclear medicine.

The above questions must be addressed and HB 652 must be properly amended in order to provide a law that can be reasonably interpreted and enforced without endangering the public health and safety and without imposing unrealistic hardships on radioactive material licensees.

INITIATIVE 84 IS NOT A BAN ON URANIUM MINING --- A FACT SHEET

by Edward M. Dobson
Principal Author, Initiative 84

- 1. Uranium mining does not produce any material regulated by Initiative 84. However, uranium milling produces tailings, which are prohibited.
- 2. In situ mining, actually a form of milling in the ground, would not be affected at all by Initiative 84, since in situ does not require a mill and produces no tailings. During in situ mining, a chemical leachate is pumped down a central injection well and into the parent ore to dissolve the uranium. The entire solution is then sucked up at surrounding recovery wells. Technically, it is possible to create a closed system so that all chemicals and dissolved uranium are recovered, and the industry fully intends to do this. Problems have been encountered when adjacent exploration holes are not properly plugged. When the solution is pumped to the surface the uranium is separated for shipment to an enrichment plant, the leachate chemicals are recycled into the next injection, and the very small amount of waste material, usually calcium radium, is required under federal regulation - 10CFR40, Appendix A, Criterion 2 - to be packaged, usually in 55 gallon drums, and shipped to an existing desposal site, of which there are none in Montana. Initiative 84 adds no further requirement However, any in situ facility could seek a waiver of criterion 2 from the nuclear regulatory commission, a waiver which could then be approved by the Montana legislature.
- 3. If an actual open pit or deep uranium mining and milling operation were begun, the mill tailings can be disposed of in Montana under Initiative 84 as long as the associated radium and thorium are also recovered. This process can reduce radioactivity to a level below that defined as radioactive material, 49CFR173.389(e). It would simply require a healthy market to justify recovery. The uranium industry is presently suffering a severe case of market forces. In situ has the most promise in Montana.
- 4. Any tailings produced where uranium is recovered as a byproduct, or by reprocessing of existing tailings such as at Butte, are not regulated by Initiative 84. Should uranium be found dominant in association with other minerals, simple exemptions could be provided as necessary.

PETITION FOR INITIATIVE

BE IT ENACTED BY THE PEOPLE OF THE STATE OF MONTANA:

New Section 1. There is a new MCA section that reads as follows:

"Policy. It is the policy of the state of Montana, in furtherance of its responsibility to protect the public health and safety, under the police powers of the state and for protection of the constitutional right to a healthy environment, to prohibit the disposal of certain radioactive material."

Section 2. Section 75-3-103(1), MCA is amended to read as follows:

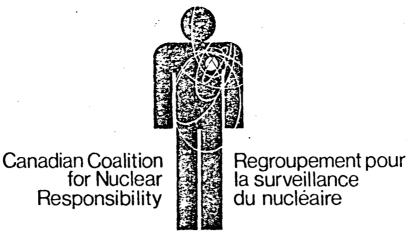
"(1) "Byproduct material" means a (1) any radioactive material (except special nuclear material) yielded in, or made radioactive by exposure to the radiation incident to, the process of producing or utilizing special nuclear material, and (2) the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content."

Section 3. Section 73-3-302, MCA is amended to read as follows:

- "75-3-302. Disposal of large quantities of radioactive material prohibited—exceptions and exclusion.
- (1) No person may dispose of in Montana large quantity radioactive material, byproduct material, or special nuclear material within the state of Montana produced in other states.
- (2) Byproduct material (except large quantity radioactive material) possessed, used, and transported for educational purposes, scientific research and development, medical research, diagnosis, and treatment, geophysical surveying, and similar uses other purposes licensed by the United States nuclear regulatory commission shall be excepted from this part, provided that such material is being or has been lawfully disposed of within Montana upon the effective date of this Act during the period of possession, use, and transportation prior to disposal.
- (3) Nothing in this part precludes the construction of a nuclear facility approved under the requirements of the Major Facility Siting Act, or the mining of any raw ore, provided that such activity is not inconsistent with this part."

Section 4. Section 75-3-303, MCA is amended to read as follows:

- "75-3-303. Penalty. A person convicted of violating this part is guilty of a misdemeanor and who knowingly or purposely disposes of large quantity radioactive material, byproduct material, or special nuclear material within Montana shall be fined an amount not less more than \$250 \$5,000 or be imprisoned for not more than two years, or both, for each offense. A person who negligently disposes of large quantity radioactive material, byproduct material, or special nuclear material within Montana shall be fined not more than \$1,000 for each offense. In this part, each day of violation constitutes a separate offense."
- Section 5. Severability. If a part of this Act is invalid, all valid parts that are severable from the invalid part remain in effect. If a part of this Act is invalid in one or more of its applications, the part remains in effect in all valid applications that are severable from the invalid application.
- Section 6. Codification. New section 1 is intended to be codified as an integral part of Title 75, Chapter 3, Part 3, and the provisions contained in Title 75, Chapter 3, Part 3 apply to new section 1.
 - Section 7. Effective date. This Act shall become effective December 1, 1980.



FINDINGS ON URANIUM TAILINGS

AND

NUCLEAR WASTE DISPOSAL

Direct Quotations and Parenthetic Summaries from Seventeen Basic Documents

Compiled by Dr. Gordon Edwards

March 1980

Unresolved: the front end of nuclear waste disposal

Long unrecognized as a problem, the hazardous wastes generated in the production of uranium at last are receiving the attention they need. The Uranium Mill Tailings Control Act of 1978, enacted during the final frenzied sessions of the 95th Congress, authorizes various government units to see that uranium tailings are cleaned up at some 22 inactive mill sites and to establish improved procedures for management of tailings at operational mills. The manner in which the Department of Energy, Environmental Protection Agency, and the Nuclear Regulatory Commission carry out this mandate will have an important impact on their credibility as conscientious and impartial arbiters of our energy future.

The agencies now responsible for regulation of mill tailings are starting at a considerable handicap. During the first decades of the nuclear era the authorities which should have undertaken management of tailings failed to do so. The potential dangers associated with tailings remained unanalyzed; standards for handling of tailings were left unformulated and disposal technologies undeveloped; hazardous situations were allowed to accumulate. As a result, there is today an unresolved issue of nuclear waste management at the front end of the nuclear fuel cycle as well as at the back end. And the agencies which are to clean up the existing mess and prevent it from recurring are in the unenviable position of having to take decisive action in the absence of adequate information and public trust. Hard as the agencies may try, their situation is likely to become even more awkward before it improves.

The radioactivity emitted by uranium mill tailings, unlike the very

concentrated radioactivity in spent reactor fuel, is highly diffuse. Nonetheless, the total quantity of radioactivity in tailings is extremely large. About 85 percent of the radioactivity present in the original uranium ore remains in the tailings, as the major intermediate contributors to radioactive emissionsthorium-230 and radium-are not removed in milling operations. The most important decay product emitted by the tailings is a noble gas, radon, which continues to decay into so-called radon daughters. Gamma radiation emitted in the decay process can cause cancers such as leukemia, and the radon daughters if inhaled cause lung cancer. Any close exposure to tailings is dangerous, and it is especially dangerous if the radioactive gases emitted from the tailings are trapped in a closed structure.1

The Atomic Energy Commission during the 1950s and 1960s first denied that tailings posed any serious dangers to public health, then tried to block research and public inquiry into mill practices in the face of increasingly disturbing evidence, and finally attempted to disclaim any institutional responsibility for the existence of a problem. The AEC's record, as Peter Metzger has shown, "at every point reflected a refusal to acknowledge the seriousness of the problem and a substantial effort to prevent others from doing so."2 The single most scandalous result of AEC policies was the extensive use of mill tailings in construction work at Grand Junction, Colorado, between 1952 and 1966.

A law enacted in 1972 (P.L. 92-314) provided for the removal of tailings from locations in Grand Junction where they were found to constitute a menace to public health; but

NAME: MARCUS BARTE	DATE: 3-11-81
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NAME: Phyllis A. Bock		DATE: 3/11/81			
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NAME: Lenry	, E. Reed	DATE: 3///	81
ADDRESS: 3/2/	McBride S	t. Billings	ald.
PHONE: 406	656 8473	2	
REPRESENTING WHOM?	Bur West		
APPEARING ON WHICH I	PROPOSAL: HB	652	
DO YOU: SUPPORT?_	× AMEND?	OPPOSE?	
COMMENTS:			
	•		
		·	

NAME:	Hancy	Swanson		DATE: March 10
ADDRESS:_	P.0.	Box 501	Whilefish	Montana
	862-			
REPRESEN'	TING WHOM?	Flathead	Energy !	Council
APPEARIN(G ON WHICH	PROPOSAL:	B 1052	
DO YOU:	SUPPORT	ema ema	END?	OPPOSE?
Voted	d in ta	vor of J	-84 - N	at the House I to not to or voters - who Je feel this cannot be is basic to. nust be protected est be honoved

NAME: Danis K. Lopach Date: 3/11/87 ADDRESS: 1: Cade Blag - 1 clerca PHONE: 12-8070
ADDRESS: 11 Cade Blag - Island
PHONE: (1)-5070
REPRESENTING WHOM? Moderation 1550
APPEARING ON WHICH PROPOSAL:
DO YOU: SUPPORT? AMEND? OPPOSE?
COMMENTS:
<u>.</u>

NAME: Ray Stricklan DATE: 3/11/1981
ADDRESS: BEY 1228 Canon City, Co.
PHONE: (303) 275-6271
REPRESENTING WHOM?
APPEARING ON WHICH PROPOSAL:
DO YOU: SUPPORT? AMEND? OPPOSE?
comments: 1 oppose HB 652 hirance et
in trature.
Le hravily impacted by wancing development.
Will water has liven untaminated;
Invistock have become ill, and regulatory
processes have been inadiquate. Transum mill workers have been
ancounced to address time dust los the
past 11 years due to the Cotter Corporation faligication of records.

NAME: MARK MACK:N DATE: 3-1/
ADDRESS: 1316 Spring St
PHONE: 442-1177
REPRESENTING WHOM? Citizens Coalition
APPEARING ON WHICH PROPOSAL: +B65-Z
DO YOU: SUPPORT? AMEND? OPPOSE?
COMMENTS: See Submitted Testino

NAME: LILLIAN ERICLEN.	DATE: Mar. 11/81
ADDRESS: P.O. BOX 1922 SAlmon, ID	•
PHONE:	
REPRESENTING WHOM? Myself	
APPEARING ON WHICH PROPOSAL: 4 B 652	
DO YOU: SUPPORT? AMEND?	OPPOSE?
COMMENTS:	

NAME: Di Ciarinelite	DATE:
ADDRESS: Communication 111 od.	
PHONE: (41-5-65-5-	
REPRESENTING WHOM? ((ETA)	·
APPEARING ON WHICH PROPOSAL: 151	
DO YOU: SUPPORT? YV AMEND?	OPPOSE?
COMMENTS:	
	· · · · · · · · · · · · · · · · · · ·

NAME: STEPHEN L. SASH DATE: 3-1/6)
ADDRESS: 1515 Arapaha 5+ Donner
PHONE: 303 _ F92 - 1034
REPRESENTING WHOM? Marethy Respure
APPEARING ON WHICH PROPOSAL:
DO YOU: SUPPORT? AMEND? OPPOSE?
COMMENTS:

NAME: 1 K. Deael	DATE: 31/3/11
ADDRESS: PO Box 6754, Albuque	erque, NM, 87197
PHONE: (505) 247-1160	
REPRESENTING WHOM? Proponents	
APPEARING ON WHICH PROPOSAL: HB 652	
DO YOU: SUPPORT?	OPPOSE?
COMMENTS: (Written comments pr	ovided committee)

NAME: MIKIBOTA	DATE: MARZ !!
ADDRESS: 1300 CEDAZ ST	
PHONE: 443-4150	
REPRESENTING WHOM? MONT MINING	ASSN
APPEARING ON WHICH PROPOSAL: 652	
DO YOU: SUPPORT? AMEND?	OPPOSE?
COMMENTS: COMMENTS LEFT WITH	GN 11/74-

NAME: Michael Fr Donnelly DATE: 3/1/81
ADDRESS: 5926 Mc Intyre ST Golden Colo
PHONE: 303 778 7750
REPRESENTING WHOM? RESOURCE ASSOCIATES Of A COSKA INC
APPEARING ON WHICH PROPOSAL: Bill 657
DO YOU: SUPPORT? OPPOSE?
COMMENTS: have provided written testing
·

NAME: Sill Stail liagaii-(by By Havi) DATE: 3(11/8)
ADDRESS: Helens
PHONE: 442 - 6736
REPRESENTING WHOM? N. 18 MIN HEST
APPEARING ON WHICH PROPOSAL: 18592
DO YOU: SUPPORT? AMEND? OPPOSE?
COMMENTS:
Det Step Verrier Minning - Althority Was
100-7 Intented
118 5012 Simply Sets up 11- Regulater
Madridey to Parmet Mine:
The Rep must be as street is there of
The Reg Met be car Strict or those of

DATE		March	11,	1981	
	-		-		

COMMITTEE ON NATURAL RESOURCES

	VISITORS' REGISTER HA	S652		
NAME	REPRESENTING	BILL #	Check Support	
M.K. BOTZ	Mom MINE ASIN	652	<u>_</u>	
Michael Doncelly	RESOURCE LEED WATERES	652		
La Statison	Personal Interest	65-		_
Trace Season	in the second	7.T.2		
James Dead	Union Industry	652	V	
Laker Hayan		152		<u></u>
S. C. Bash	Manthen Range	652	\sim	
Jon Snow	E10	652		
minumer of the second				
march British			V	· · · · · · · · · · · · · · · · · · ·
7/12/2000				
Bob issin	CIC	652		-
Maryullham	self	652		1/
Pull Tielock	all	650		/
Huy Stricklen	Canon City Polo.	652		V
Jillon morsier	Faturelling	520		<u></u>
1 1. 7 . 1. 2.	The sai There Course	1052		0
MIKE MALES	E.I.C	652		
comet somtin	Sif	652		<u></u>
Julie Reyma		652		
- 1000 - 1000 C	501	652		
Art Kussman	7117 804	//	• 44	X
RHa Weeky		1 (4
Ozmax kunh	QU.	452		X
Jeny Loyd	Well Hall En Sa	652	Yechn.	č.LI
allow the Ty	Comen Couse	652		
Please leave	prepared statement with Sec	rotarul		

,	VISITORS' REGISTER HB	.32	-	
NAME	REPRESENTING	BILL #	Check Support	
MARKMACKIN	C. + Colitic	HB652		
NARCIS BARTE	I Destamon for Vacleur	148652		X
	Responsibility			
Agulle Fullan	Man ana Chamber		X	
Those ROLinter	Asirca	HB662	- X	
Bil Hand	Mining Perce-	ιζ	X.	
Bu Stan Governing	NIP Was Arice -	((×	
Elin Dirante	19	HB652		*
Primary Listen	the	HR452		~(_
andie Erian		HB652		\times
100- Peterson	Tute -	4B652		
Guran Peterson	ude	ţc		,
Henry ERad	Burlew. +	145652		
James Herdell	Self.	116652		
Lancer Huss	Hons Mining Ssoc	18652	X	
SISIN Groff	State Geologist	65-2	1	
- Jan Christin	Conoca	H-652	V	
Igan Street	atrien	PB 652		<u> </u>
- Wicht	colins-	45629		2
9 Kommerer	Gottelamin	UPL53		/
Lary Coppen	Aniconda / BRCO	11	43	V
A A C	Claren	113652	A /	
I Chef Ismen	citizen	٠,	✓	
- Milli boanhard	MIT. Mining Joses	′′	-	
Mara Retarate	Conomic Sobolizator Roy Lourses	,,	V	
Edward M. Dolson	self + I-84	HB652		

DATE	3-11-81	

COMMITTEE ON

	VISITORS' REGISTER /	4B-6	
NAME	REPRESENTING	BILL #	Check One Support Oppose
Larry Fachinde	Dov. office	652	\mathbf{k}
inma Skelling	Flo. Office	652	X
Client Lucy	Claywil 7 Union	652	X
leh Anderson	9	652	
Sind: Palack		6.5.2	
Tracy Poupa		652	
Pullis a Beck	MITS POWER TO THE PEOPLE	652	×
Dann a. North	Longue of Women Votors	652	
atte Transich	citizen/sev	652	\sim
Ruth Candnew	Sily (652	X
Joe Niewman	atizin	652	×
Links Elliet	Montana Smill Business as	1. 652	X
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			-