

Approved 4-10-87
Date

MINUTES OF THE SENATE COMMITTEE ON ENERGY & NATURAL RESOURCES

The meeting was called to order by Senator Merrill Werts at
Chairperson

8:00 a.m. ~~pm~~ on March 31, 1987 in room 123-S of the Capitol

All members were present except:
Senator Eric Yost

Committee staff present:

Ramon Powers - Research
Don Hayward - Revisor
Nancy Jones - Secretary

Conferees appearing before the committee:

Dr. Ralph Robinson, Kansas University Medical Center
Laura Menheusen, Jewell, Kansas
Jim Power, Kansas Department of Health & Environment
Stephen Boyda, Marshall County Commissioners
Terry Tait, Idaho National Energy Labs
John McClure, Glen Elder, Ks.

Hearings continued on:

SB 406 - Relating to the creation of a low level radioactive waste disposal authority

Jim Power testified that withdrawal from the Compact or being selected as the host state could require the creation of an Authority to manage, develop, and operate a LLRW facility. A legal barrier is needed between the developing/operating authority and the agency regulating the facility. Concerns were expressed relating to authority for licensing, establishment of fees, and the responsibilities of a regulatory agency. More clarification is needed in Section 9 regarding transportation, inspection requirements and packaging. The Department's role relative to the Authority needs further examination by the Committee.

Chairman Werts requested a ballon copy of the bill with comments and suggested amendments of Mr. Power be made available to the Committee as soon as possible. (Attachment A)

Dr. Ralph Robinson spoke in favor of the concepts embodied in SB 406. Creation of the Authority would establish strong local control within the state. An Authority would provide needed state control for site selection. Dr. Robinson outlined language suggestions to improve the proposed legislation. It is also felt the Authority should have the option of dealing with the Compact or other states to form a new compact. The proper role of KDHE should be clearly defined as being that of regulation and inspection. (Attachment B)

An interim study committee for SB 114, SB 406 and HB 2108 as they interrelate, was recommended by Dr. Robinson.

John McClure stated passage of SB 114 as a companion bill to SB 406 is necessary to make it clear Kansas does not want to be the host state for a compact. The concepts expressed in SB 406 are valid, and creation of an Authority will ensure that concern for the health and safety of Kansas citizens is foremost. Mr. McClure offered suggestions for changes in Section 4, 5 and 7. Passage of SB 114, SB 406 and HB 2108 will create a foundation for sound LLRW management. (Attachment C)

CONTINUATION SHEET

MINUTES OF THE SENATE COMMITTEE ON ENERGY & NATURAL RESOURCES,
room 123-S, Statehouse, at 8:00 a.m./~~PM~~^{XX} on March 31, 1987

Laura Menheusen testified to the importance of appointees to the Authority created under SB 406 as being above politics and dedicated to preserving a quality of life for Kansans. Members chosen should be experts in their fields. Distrust of statements made by the representative of the Compact was expressed. Passage of SB 406 and SB 114 was strongly urged. (Attachment D)

Written testimony of Mark McDonald was given to Committee members. (Attachment E)

Stephen Boyda testified as supporting SB 406 if Kansas withdraws from the Compact. It is felt the Compact has four obligations: to adequately inform citizens; provide that technologies used be the best available for safety; the site selection process shall be fair and suitable; and waste production figures be accurate for liability purposes. Mr. Boyda cited four areas in which he feels the Compact has failed to meet its obligations: a "pass the buck" system; appropriate technology; suitability of the Dames & Moore study; and lack of accurate information. Committee members were asked to give their attention to information from the Arkansas Alliance report regarding LLRW in Oklahoma. (Attachment F)

Concern was expressed regarding language allowing burial of LLRW under certain circumstances, as stated in SB 406. Mr. Boyda also feels site selection should be done by the Kansas Geological Survey.

Terry Tait stated that his remarks represented his professional opinion and not necessarily those of the U.S. Department of Energy. The LLRW Act encourages the states to assume responsibility of waste generated within their borders and to enter into compacts for establishment of LLRW disposal facilities. Mr. Tait strongly urged the legislature to examine closely the ramifications of "going it alone". Failure to meet federal milestones could result in loss of access to existing disposal sites, which could require a generator to store its own LLRW until a facility is available. The economics and safety of a small volume disposal facility is a major issue to consider. (Attachment G)

Mr. Tait responded to questions from Committee members. The Department of Energy determines milestone compliance for the purpose of returning rebates. The Compact Commission determines milestone compliance for the purpose of imposing penalty surcharges and/or denying access to LLRW facilities. When cited states come into compliance, penalties can be rescinded but money cannot be recovered if milestones are not met. If Kansas withdraws from the Compact and enacts legislation establishing a state Authority, the legislation should be submitted to the DOE asking for confirmation of compliance with the 1987 milestone and three 1988 milestones. In the opinion of Mr. Tait, Kansas would not be in conflict with the first timetable milestone if actions are made in good faith.

Meeting adjourned. The next meeting will be April 1, 1987.

Sunat Energy - Guest List

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John K. Blythe	Manhattan	Ks Farm Bureau
Jerry Connors	Topeka	KG&E
James Power	"	KDHE
Terry D. Tait	Idaho Falls, Idaho	EG&G Idaho, Inc
Greg Schmidt	Wome, Ks	
Rebecca Dunlap	Beattie, Ks	
Steve Boyda	Marysville, Ks	
Frank Welkin	Topeka	Oil Funds
Ed Reinert	Topeka	Ks L W V's
Karen McIntyre	Randall	Jewel Co. Republican
Ray Peery	Atlanta, GA	Central States Compact
Bob Semmler	Houston TX	GM. ENRIDGE
Shaun McGrath	Topeka	Topeka
Lupeth Byer	Topeka	KNRC
Craig Schwartz	Topeka	KDHE
Richard Guerin	Frankfort	
Ralph B. Robinson MD	Kansas City, Ks	KU Med Ctr
Marshall Clark	Topeka	K EPCo
Kevin Davis	"	League of Ks Municipal
REX BUCHANAN	LAWRENCE	Ks. GEOLOGICAL SURVEY
Mary Fund	Whiting	Ks. Rural Center
Steve H. McClain	Goff	
Sophy George	Topeka	Sen. Helms
Rose Flora	Topeka	Ks Rural Center
Daughn Flora	Topeka	Ks Rural Center
For Schneider	TOPEKA	Ks RURAL CENTER
Bruce Zarkin	Baldyville	Rep.
Chuck Horsman	Wichita	CITIES SERVICE OIL & GAS

Paige Graening	Tulsa	Cities Service
Don Hewitt	wichita	
Mary Ann Bradford	Topeka	KS Advisory Comm Environment
Margo Murrey	Topeka	
Roger Lambson	Kansas City	KUMC
Denny Burgess	Topeka	KEC
Rich McKee	A	Kansas Environmental

Testimony Presented to
Senate Energy and Natural Resources Committee

March 31, 1987

by
James A. Power, Jr., Acting Director
Division of Environment
Kansas Department of Health and Environment

Senate Bill 406

Senate Bill 406 would establish a Kansas low-level radioactive waste disposal authority. The department supports Senate Bill 406 and, as indicated in previous testimony before this committee, the department considers the establishment of such an authority essential if Kansas withdraws from the Central Interstate Compact. This authority will be required to manage and oversee the selection, development, and operation of the state's low-level radioactive waste management facility. Such an authority should be created as a separate state entity to provide a legal and jurisdictional barrier between the authority operating the facility and the authority regulating it. Even if Kansas remains in the Central Interstate Compact, such an authority will be needed if Kansas is selected as a host state, to oversee the selection and development of the site by the developer. Again, a legal and jurisdictional barrier is needed between the siting authority and the agency regulating the facility.

The department has examined the regulatory role of the department under Chapter 48 - Article 16 and Senate Bill 406, as well as the authority under Senate Bill 406.

Role of a Regulatory Agency

The responsibilities of the regulatory program to license and enforce the law when a facility is not in compliance should be clearly defined in the statutes. The legislature should define the policy and those areas which the regulatory agency can formulate rules and regulations to carry out legislative policy.

In examining Chapter 48 - Article 16 and Senate Bill 406, a number of questions arise under the assumption that the state owns and operates the facility (Section 5a) and the radioactive waste accepted by the authority shall become the property of the state (K.S.A. 48-1622(c)).

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Licensing

Low-level radioactive waste should be added to K.S.A. 48-1607(a) to expressly allow the Secretary to license and develop rules and regulations. The absence of this change, could invite challenges to the department's authority to license and regulate.

Fees

K.S.A. 48-1606(d) allows the Secretary to adopt rules and regulations to fix annual fees for the facility not to exceed \$300,000. Such fees would be deposited in the state treasury and credited to the state general fund. Should this assessment apply if the facility is to be operated by the state? If so, the word "hazardous" used in defining the facility should be deleted.

Section 16(b)(3) of Senate Bill 406 sets forth the elements to be included in the fee structure. The section provides for perpetual care of the disposal site. K.S.A. 48-1622(d) creates long-term care funding. K.S.A. 48-1623(b) creates a closure and reclamation fund. Finally, K.S.A. 48-1623(i) notes all state or governmental agencies shall be exempt from financial arrangements to assure adequate funds for perpetual care.

K.S.A. 48-1622 and 1623 need to be carefully reviewed in the context of Section 16. The legislature needs to review --

- If the authority is responsible for the site and collect all fees, should the department be involved at all in perpetual care funding? (Note Section 3 which gives the Authority exclusive jurisdiction for decommissioning, closing, and financing of disposal sites.)

Section 9

Under Section 9 the following need to be reviewed:

- If, under the concept that the state-owned and -operated facility is designed to accommodate only Kansas low-level radioactive waste and is to be open part-time except during decommissioning of Wolf Creek, would it not be logical to allow --

1. the Secretary to adopt rules and regulations on disposal packaging;
2. the authority to designate the time of year waste will be accepted;

3. the authority to inspect, accept, or reject the packaging for disposal upon arrival at the site with oversight by the department;
4. the authority to repackage or return the waste to the generator, if necessary; and
5. the department to assess a fine to the generator for noncompliance with the Secretary's rules and regulations.

We would like to clarify several of the above statements.

New Section 9(a)(2): It is unclear whether the packaging of low-level radioactive waste referred to in this subsection is for transportation or for disposal. For the purpose of clarification, the department, in K.A.R. 28-35-195a through K.A.R. 28-35-196b, has already adopted those parts of U.S. Department of Transportation regulations (49 CFR) which apply to the packaging, labeling, and transporting of radioactive materials. Those regulations do not apply to packaging for disposal.

The department currently conducts routine inspections of the packaging and shipping of low-level radioactive waste by its licensees. This does not include waste shipped from the Wolf Creek Generating Station. The department intends to continue such inspections. However, New Section 9(a)(2) would require an inspection of each package of low-level radioactive waste before it is transported. Because of the stringent requirements for the transport of all radioactive materials, the department does not believe that such inspections are necessary and could be very costly in terms of staffing requirements. As part of its regulatory program, the department anticipates having an on-site resident inspector at the facility who would inspect and approve each shipment before it is processed for disposal. This is currently being done by the states in which the three existing low-level radioactive waste disposal facilities are located.

New Section 9(d): It is suggested that consideration be given to a provision to allow the on-site operator or agent to turn away and send back any shipments of low-level radioactive wastes which are not properly processed or packaged, as long as they meet transportation regulations and would not pose a risk to health and environment over and above that which would exist if they were properly processed or packaged. The low-level radioactive waste facility may not have capabilities to reprocess and repackage all types of low-level radioactive waste.

We wish to make the following comments on specific wording within the bill:

Line 0084 - It is suggested that the word "license" be added to read "...duties to license, regulate..." since the department will also be the licensing authority.

Line 0175: It is suggested that the impact on requirements for medical services also be included.

Recommendation

The department commends the Senate Energy and Natural Resources Committee for recognizing the need to separate the roles of the department and the authority, however, the committee needs to examine the department's role as it relates to its duties to regulate, inspect, and monitor the disposal site.

Ralph G. Robinson M.D.

*2216 West 49th Terrace
Shawnee Mission, Kansas 66205*

STATEMENT REGARDING KANSAS SENATE BILL 406

AN ACT ESTABLISHING THE KANSAS LOW-LEVEL RADIOACTIVE
WASTE DISPOSAL AUTHORITY

Presented before the Senate Committee on Energy and Natural Resources Meeting,
Tuesday, March 31, 1987

Statement: Mr. Chairman, Members of the Committee on Natural Resources. I am Ralph G. Robinson, M.D., a practicing Nuclear Medicine physician at the University of Kansas Medical Center where I am Professor of Diagnostic Radiology and Head of the Division of Nuclear Medicine. I appeared before this Committee this past February 27 regarding SB 114, legislation related to the Kansas Low-Level Radioactive Waste Authority Measure proposed in Senate Bill 406. I am here today to represent my personal views, and do not speak for the University of Kansas Medical Center.

I remain opposed to the passage of SB 114, which would provide for the withdrawal of Kansas from the Central Interstate Low-Level Radioactive Waste Compact, but speak in favor of the concepts embodied in SB 406.

The creation of a Kansas Low-Level Radioactive Waste Disposal Authority would provide a mechanism for Kansas to deal with low-level radioactive waste generated within its borders, should access to other sites through the Central Interstate Low-Level Compact be denied, or should Kansas, for some reason, be required "to go it alone." More importantly, the creation of the Authority would establish strong local control within the State of Kansas. Such an Authority would represent Kansans to other state and federal bodies relative to our handling of low-level radioactive waste. A Kansas Authority would provide the needed state control for

a potential site within our borders, while at the same time reassuring Kansans that Kansas is taking an active role in the management of any low-level radioactive waste which might come into our state.

I do believe that any Authority established should have the freedom to interact with any local, state, regional or national organization to best serve the needs of Kansas, and therefore would make the following observations to further improve the proposed legislation.

1) Lines 0120-0122 (New Section 5a): This section dictates the development of one low-level waste disposal site in Kansas. This is not a foregone conclusion. I would suggest changing the word "may" for "shall", or further clarifying the passage to read, ". . . that the Authority could develop a site should Kansas be required to do so."

2) Line 0253. The specific requirement that 3 states be included in a possible future compact is restrictive. I would prefer language such as ". . .two or more states", or language which would leave open the final number of states who might wish to become associated in an existing or future compact.

3) Line 0308-311. In the event that Kansas would develop a site and become a repository for low-level radioactive waste originating in other states, the requirement for a Kansas inspector to inspect packages from outside our geographical boundaries before shipment to Kansas would appear to be excessively duplicative and expensive. Any shipments originating in other states must meet numerous federal guidelines for transportation. The stringent provisions in SB 406 regarding on-site inspection would appear to be adequate to protect our interests.

4) Line 0395. I would suggest a statutory life of 30-40 years rather than limiting it to no more than 20 years. This is based on my opinion that the unit cost of disposed material at a site serving a relatively small population base will be quite high on a per-unit basis. Because there is a significant start-up cost associated with any licensed waste facility (estimates range from \$18-25 million), and because of the high unit cost, a longer statutory lifetime would allow a more reasonable unit cost, while at the same time allowing adequate funding to build up for ~~per~~ perpetual care of the site once it is closed. I believe a longer allowable lifetime for a site

will place it on firmer financial footing. The financial integrity of this venture will be very important to any bonding authority which might be examining the financial viability. This problem would be compounded by a relatively short useful life span. Should this site need to be closed in a shorter period of time, based on the opinion of the members of the Authority, that would be a reasonable decision based on current data. However, I would recommend a longer allowable life span in the proposed legislation.

I believe that such an Authority should have the option of dealing with the existing Central Interstate Compact, other compacts which might be formed in the future, and with federal agencies. The proposed legislation should keep all of our options open at this time. According to Mr. Ray Perry, the Executive Director of the Central Interstate Low-Level Radioactive Waste Compact, the proposed Kansas Authority would not be in conflict with the federal enabling legislation which established the Central Interstate Compact. In addition, Mr. Perry observed that, despite some published reports to the contrary, the Central Interstate Commission welcomes the opportunity to interface with strong and responsible state representation as provided in SB 406.

And finally, SB 406 would provide that the Department of Health and Environment would assume its proper role, that of an advisory and inspecting body, rather than assuming the operation of such a site. This, therefore, clears up the possible conflict of a single state agency providing for the operation and inspection of a low-level waste disposal facility.

In conclusion, I support the concepts embodied in SB 406, and see it as a positive force for Kansas to interact with neighboring or distant states in the interests of all the people of Kansas regarding the responsible handling of low-level radioactive waste.

Thank you.

A handwritten signature in cursive script, appearing to read "Ralph B. Roberts", with a long horizontal line extending to the right.

John D. McClur
Box 72
Glen Elder, Ks 67446

Testimony On SB #406
Presented to the Senate Energy & Natural resources Committee.

Provideing that S.B.114 is passed as a companion bill,

I support SB. #406 that will establish a Kansas Low Level Radioactive Waste Disposal Authority. The financial and environmental costs of a failed llraw facility are so great that we cannot allow Kansas waste management policy to be set by an individual contractor or an out of state commission that may worry more about near term convenience than long term safety. The establishment of a Kansas llraw authority will insure that decisions regarding radioactive waste management in our state are made with the health and safety of Kansas Citizens as the foremost concern.

It is very apparent that SB #406 is the product of a great deal of thought and research into this issue. The questions I have about it are insignificant when compared to the positive aspects of the bill and hopefully the following comments will simply help to make a good bill even better.

New Sec. 4. (a) Should spell out a little more clearly what the Authority can do with it's funds.

New Sec. 5. (a) States that the authority shall develop one site. If in the future a technology is developed that calls for more than one site (for example, it might be determined that different classes of llraw should be stored in seperate facilities), sub section (a) would prevent adoption of the new technology. The authority should have a degree of discretion for such a case.

New Sec. 5(b)(4)(A)(Top of page 5) I feel that the words,"or recomended against" should be struck from the bill. These words could prevent the acceptance of new technologys that would improve our ability to manage llraw.

New Sec. 5.(c)(4) Should state how much participation local units of government will have in the process and when the authority must give notice to an area that has been picked as a potential site host.

Sec. 7. I feel that the secretary of the department of health and environment should not be able to enter negotiations for a compact without approval by the authority.

In summary, Kansas produces llraw and it only makes sense that the state have an authority to address the serious problems presented by this waste. The passage of SB#406 in conjunction with SB.#114 and HB. 2108 will give Kansas the foundation for a sound llraw management policy that current and future generations can live with. At the same time demonstrating that we the people of Kansas have the courage and resourcefulness to break new ground if necessary in order to meet our problems head on.

Thank you.

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3-31-87

TESTIMONY ON SB 406
SETTING UP A LOW LEVEL RADIOACTIVE
WASTE MANAGEMENT AUTHORITY

PRESENTED BEFORE THE SENATE SUB COMMITTEE
ON ENERGY & NATURAL RESOURCES

BY LAURA MENHUSEN
PRESIDENT N.C.K. CITIZENS
JEWELL, KANSAS
MARCH 31, 1987

FIRST I WANT TO SAY THAT I SUPPORT THIS BILL IN CONJUNCTION WITH
SB 114, WHICH WOULD WITHDRAW KANSAS FROM THE CENTRAL INTERSTATE COMPACT,
AND HB 2108, WHICH BANS THE BURIAL OF HIGH AND LOW LEVEL RADIOACTIVE
WASTE IN KANSAS.

ON LINE 18, PAGE 1---I WOULD LIKE TO SEE THE WORD DISPOSAL REPLACED
WITH THE WORD MANAGEMENT. AS YOU KNOW, AT THIS TIME THERE IS NO WAY
TO DISPOSE OF RADIOACTIVE WASTE, YOU CAN ONLY STORE AND ISOLATE IT
FROM OUR ENVIRONMENT.

IN ESSENCE THIS LOW LEVEL RADIOACTIVE WASTE MANAGEMENT AUTHORITY WOULD
BE OUR OWN COMPACT COMMISSION.

THIS AUTHORITY MUST BE ABOVE POLITICS. I DO NOT WANT TO SEE THIS
AUTHORITY TURN INTO JUST ANOTHER BUREAUCRACY. THE PEOPLE APPOINTED
BY THE GOVERNOR AND APPROVED BY THE SENATE MUST BE DEDICATED TO
PRESERVING THE QUALITY OF LIFE FOR OUR FUTURE GENERATIONS. EACH
MEMBER MUST BE CHOSEN CAREFULLY FOR THEIR KNOWLEDGE IN THEIR FIELDS
AND POSSESS A GREAT DEAL OF COMMON SENSE.

THIS AUTHORITY IS ONLY GOING TO BE AS GOOD AS THE PEOPLE CHOSEN TO
SERVE ON IT. THEIRS IS NOT GOING TO BE AN EASY JOB.

I FEEL THE CREDIBILITY OF THE CENTRAL INTERSTATE LOW LEVEL RADIOACTIVE
WASTE COMPACT HAS BEEN DAMAGED BEYOND REPAIR. YOU HAVE TO HAVE FAITH
IN THE SYSTEM---CAN WE HAVE FAITH IN RAYMOND PEERY AND THIS COMPACT?????

IT IS IN RAYMOND PEERY'S BEST INTEREST TO KEEP THIS COMPACT TOGETHER.
THAT IS HIS JOB!!!

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Energy
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Statement by the Arkansas Alliance, Joint Energy Committee, March 2, 1987:

The Central Interstate Compact Commission is in a lot of trouble because of a number of reasons:

First, it is trying to force a landfill burial of radioactive waste in unsuitable climates and geology and discourages any attempt to build the safest and surest technology at the moment, which is above ground storage.

Second, it is operating in a smokescreen of confusion about its methods, procedures and tactics.

Third, It is using as its guide a high-priced, computerized engineering study hatched in New York that is inaccurate, out-of-date and dangerous.

Fourth, one item in its procedure that has disturbed the residents of Cleveland Co, is its abandonment of its responsibility for protecting the health and safety of the people by turning the decision about siting, technology and public input over to a for-profit private contractor.

Fifth, It has stirred tremendous public opposition in Nebraska, Kansas, and Arkansas because of its use of threats, exaggerations and outright falsehoods in its desperate attempt to hold this fatally-flawed house of cards together.

To be specific, it is obviously going to bring about a so-called "enhanced shallow land burial" dump if this thing is ever built in our five states. So what is an "enhanced shallow land dump?" Nobody on the Commission can tell us for sure, but it has been described as modifying the old traditional landfill garbage dump by better trench caps, stabilization of waste containers so they won't collapse and slump, etc. These devices were suggested after the horrible failures of dump sites at West Valley, N.Y., Maxey Flats, Ky. and Sheffield, Il. These innovations have never been tried; they have never been tested thoroughly, and in truth they are not very promising. The NRC published results of a three year study to demonstrate their effectiveness in NUREG/CR-4194 and the conclusions were not reassuring. Three of the trench covers failed and the best they could say about the one they called a success is that it reduced water infiltration.

That is simply not good enough for the people of Arkansas, or Kansas or Nebraska. We should listen to the words of a person who learned about this the hard way - here is a quote from Mr. James L. Harvey, the former President of the Nuclear Engineering Co. which once operated the Maxey Flats and Sheffield dumps. He says that shallow land burial in the eastern half of the U.S. is not a good thing, and, here is a quote: "I don't have too much of a problem with a shallow land site in a desert area. The only place I have a problem, and I've had a lot of experience in this, is where you have heavy

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rainfall. It's a real bear to operate a burial site in those places." Just before the Congress ordered the opening of nuclear cemeteries in humid states, an EPA official said that "it may be infeasible, using current waste types, containers and procedures, to use the technique of shallow land burial in humid climates." The Pine Bluff Commercial interviewed a woman who lives near the Sheffield Illinois failed dumpsite, which is leaking the radioisotope tritium into the outside environment, and she said, and I quote: "My suggestion to the people of Arkansas is don't let them bury anything in the ground.", and she encouraged Arkansas to pull out of the Central Interstate Compact.

On the subject of our Compact's insistence on a landfill burial, the Midwest Compact law prohibits shallow land burial, and the State of Michigan is now considering becoming the Host state and is planning to build an above ground storage facility very similar to the building we have now at Arkansas Nuclear One at Russellville. At least 19 states forbid shallow land burial by law, or are a part of Compacts that will not allow land burial. The obvious question is: why does our Compact insist on shallow land burial?

On the matter of the smokescreen and confusion this Compact has generated one prime example is the utterly bewildering situation where they pick out a series of what they call "preferred siting areas" with "suitable geology" in the five states, and go through a three step elimination process and then thoroughly confound the people with the sweeping statement that the dump site could be placed anywhere! / ^{TALK ABOUT NEW SITES AT CAMSEY & POWELL} The obvious question is: why did they bother with all these siting studies for if they are so meaningless?

The Dames & Moore engineering studies have been challenged as to their accuracy in North Carolina and South Carolina, in the Southeast Compact, and we have cause for the same concern here. For example, there is a great deal of confusion about the role of Oklahoma in our compact. Oklahoma has been excused from the threat of having a dump site because Dames and Moore says there is no suitable geology. (It is ironic that they persist in identifying the clay deposits in Cleveland Co. as being suitable, when they are totally unsuitable for a landfill dump!). Further, the substantial radioactive waste generated by the Kerr-McGee uranium processing operations in Oklahoma have been totally ignored by Dames & Moore in their projections. We insist that Kerr-McGee's own documents filed with the NRC exhibit an intent to use the Central Interstate Compact dumpsite for their waste, and the amounts indicate that Oklahoma could be the major contributor to this waste stream. The Central Interstate Compact engineering is very questionable in this regard, and the Oklahoma waste stream could overwhelm and unhinge the dump operation.

The people of Arkansas, Kansas and Nebraska are very, very suspicious of the procedure wherein the Compact selects a contractor first and then this

contractor is empowered to pick the site, develop a program to inform the public, and decide on the technology. The argument that the state agencies will permit and license this procedure is not reassuring when we consider it is precisely these agencies that are a part of the Compact today that gives us such concern.

We are most disturbed by the reports we receive from citizen's groups in Nebraska and Kansas about the visits they have received from the Executive Director of this Compact. We have been told that he threatened these states with excessive cash penalties if they withdrew from this Compact, in the form of five years of surcharges that would be assessed and would run into millions of dollars. We asked Compact Commission member Sherrad Bhatia of Kansas about this and he told us this was sheer exaggeration, and that the Compact Commission has never discussed such penalties being assessed against any member under any conditions. The officials of the Compact Commission have also indicated that Texas, which is going it alone, will be forced to accept wastes from other states. The spectacle of this Commission taking on such a desperate, hard-sell attempt to coerce public and legislative opinion in this matter does not sit well with the people of Arkansas, Kansas and Nebraska.

In addition to these misrepresentations, the Compact Commission has also attempted to distort the position of the Nuclear Regulatory Commission in regard to our attempt to utilize the existing above ground storage building now in use for handling this waste at Russellville. The Arkansas representative on this Compact Commission stated last Monday in a hearing in this room that the NRC would not approve of above ground storage of this waste material, and the Executive Director has indicated the same position.

Part of your exhibit contains documentary refutation of this statement by the Compact Commission. As a matter of fact, the present low level radioactive waste storage facility at Russellville, was built and licensed by the NRC under the terms required in their Generic Letter 81-38, dated Nov. 10, 1981 and entitled "Storage of Low-Level Radioactive Wastes at Power Reactor Sites" and it contains the following statement: "For proposed increases in storage capacity for more than five years (long-term), the application and review procedures will be pursuant to 10 CFR 30 with consideration of container integrity and retrievability, volume reduction, influence on state planning for disposal, and implications of de facto onsite disposal. Any long-term license issued will be for a five-year, renewable term." (end of quote). We maintain that this opens the door to the possibility that we can achieve a long-term disposal of this waste at the existing facility that is by far the safest and most economical approach for Arkansas. In addition to this, Commission members have exaggerated the volume, quality and problem of

4- This arrangement, approved by the NRC, that allows long-term storage with renewable 5 year licenses at reactor sites, ~~has~~ been approved for New York State and the State of Maine. Please see the correspondence on this in your file. There is no reason such an arrangement can not be arranged for and approved in Arkansas.

institutional, or medical waste generated in Arkansas. In any case, the NRC also has opened the door to the possibility that this so-called "commercial" waste material may be store at the reactor sites under certain conditions. We maintain that under the terms described in NRC Generic Letter 85-14 dated August 1, 1985 it is perfectly feasible to store this very small amount of waste generated in Arkansas at the existing facility in Russellville.

There has been a great deal of misrepresentation spread by this Commission about the costs to Arkansas of going it alone. This argument has never estimated the cost of staying in the Compact, which will be far in excess of going it alone, ^{WHICH IS} ~~the~~ the rational, realistic plan presented by Sen. Scott in Senate Bill 77. The cost of building a dumpsite and then packaging the waste from Arkansas Nuclear One and trucking it to a dump and burying it will run into millions and millions of dollars that we are not paying now and will not have to pay if we go it alone. It is time to blow the whistle on this fabrication.

The Compact may also have had some responsibility for creating in Arkansas the myth that Kansas and Nebraska would get the first dump sites and Arkansas wouldn't have to worry about a site for at least 60 years, by which time the technology would be worked out, etc. Ignoring the moral reprehensibility of this argument, in terms of just plain facts it is nonsense. ^{KANSAS WILL ABSOLUTELY NOT ALLOW THE USE OF THE LYONS SALT MINE.} Kansas and Nebraska are not about to allow a shallow land burial dump, enhanced or not, and their legislators are far ahead of ours in being poised to bolt right out of this Compact at the first time they are under the gun to be forced to accept a landfill radioactive dumpsite. Our main worry is that Arkansas does not yet have such a protection - the only hope we have is to pass Senate Bill 77 before this legislature adjourns. We must consider the danger of having Kansas and Nebraska pull out of the Compact when this legislature is not in session, and facing the possibility that Arkansas suddenly is Number One on the list for receiving a mandate to provide a shallow land burial dump for radioactive waste destined to leak radioactivity into the outside environment. The people of Arkansas will not allow this, and they look to this legislature to protect them now.

We must resist being stampeded and pressured into staying in a Compact that is so poorly prepared and constructed that it could be dangerous to our health, economy and future. There is talk of the five states not having enough wastes generated to make it economically attractive for a contractor, and accordingly joining a big midwestern compact. - What about the threat of having a truly monster dump in Arkansas when our turn comes in such a Compact?

There is also talk that there may be only one bidder in our Compact, who

could require that the states furnish the up-front capital required to build a \$30 million plus dump and also remove all liability from the contractor. Our Central Interstate Compact Commission is currently empowered to do things like that in our name and that is an unacceptable danger to the state of Arkansas.

Before we become any further enmeshed in the cost and implications of these possibilities, we should withdraw - immediately - and choose the best path for Arkansas. There is a strong possibility that the maximum penalty will be only \$25,000 and that's all. We could consider ourselves very lucky then!

For our future possibilities when we are independent of this Compact, we can look forward to the possibility of storing the waste at Russellville for the life of the reactor, and making the generator of this waste, Arkansas Power and Light, responsible for paying for this storage. Texas may need a low-volume waste generator as a partner in a new Compact, that could be written so that Texas would keep the dump site permanently and Arkansas would be committed to the lowest possible waste stream generation.

Kansas and Arkansas could form a compact, after both these states get out of the Central Interstate, with both states storing the wastes at the reactor sites for thirty or more years and seek a permanent solution during this period for the containment of these wastes for the thousands of years they must be isolated.

There is time to solve this problem in a safe, economic and creative fashion, but only if we act now to escape from this doomed Central Interstate Compact and set up an Arkansas Low Level Radioactive Waste Authority to plan a future in the best interest of Arkansas.

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

August 1, 1985

TO ALL LICENSEES

SUBJECT: COMMERCIAL STORAGE AT POWER REACTOR SITES OF LOW-LEVEL RADIOACTIVE WASTE NOT GENERATED BY THE UTILITY (Generic Letter 85-14)

Gentlemen:

The Low-Level Radioactive Waste Policy Act of 1980 (P. L. 96-573) assigned to the states the responsibility to provide for disposal of commercial low-level radioactive waste (LLW) generated within each state. The Act envisioned that all states would be capable of providing for disposal of commercial LLW generated within their borders by 1986. Based on the current status of state efforts and the substantial time required to establish new disposal facilities, no new sites will be available for at least several years. Due to the uncertainty of this situation and statements made by some officials of states within which currently operating disposal sites are located, it appears possible that access to the existing sites may be restricted.

While some licensees have taken steps to temporarily store LLW generated at their sites to alleviate any impact that limiting of access to disposal capacity may have on licensed operations, provisions for storing LLW should be used only for interim contingency purposes. It is the policy of the NRC that licensees should continue to ship waste for disposal at existing sites to the maximum extent practicable.

In anticipation of possible curtailment of access to existing disposal facilities, interest is being expressed in some states in commercial storage of LLW generated within the states. While the NRC recognizes that storage may appear desirable in states which have not resolved their low-level waste disposal problems, commercial storage facilities, however, should not become *de facto* disposal sites. NRC will require for commercial storage under its jurisdiction that, in addition to safe siting and operation, commitments and assurances be made for eventual disposition of all waste stored at commercial storage locations. This includes provisions for repackaging (if necessary), transportation and disposal of the waste, as well as decommissioning of the facilities.

Some of the concepts for commercial storage involve using nuclear power reactor sites as commercial storage locations for LLW not generated by the utility licensee. As a matter of policy, the NRC is opposed to any activity at a nuclear reactor site which is not generally supportive of activities authorized by the operating license or construction permit and which may divert the attention of licensee management from its primary task of safe operation or construction of the power reactor. Accordingly, interim storage of LLW within the exclusion area of a reactor site, as defined in 10 CFR 100.3(a), will be subject to NRC jurisdiction regardless of whether or not the reactor is located in an Agreement State, pursuant to the regulatory policy expressed in 10 CFR 150.15(a)(1). Within Agreement States, for locations outside the exclusion areas, the licensing authority is in the Agreement State.

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

November 10, 1981

TO ALL HOLDERS OF AND APPLICANTS FOR OPERATING LICENSES AND CONSTRUCTION PERMITS

SUBJECT: STORAGE OF LOW-LEVEL RADIOACTIVE WASTES AT POWER REACTOR SITES
(Generic Letter 81-38)

Gentlemen:

As a result of a reduction in waste disposal availability in the United States, many nuclear power reactor licensees are taking or are planning to take steps to provide for additional onsite storage of low-level radioactive wastes generated onsite. These steps range from storing packaged wastes in unused space to construction of new facilities for volume reduction and extended storage. The NRC has been considering the variety of plans which are underway and how they should be reviewed and approved.

Actions on waste storage can influence the development and implementation of final disposal plans by states, acting individually or on a regional basis, to establish additional disposal capacity. Some states have indicated to NRC that utilization of disposal services by nuclear power plant licensees is essential if disposal sites are to be developed by states or regional compacts. Thus, it is important that the NRC not take deliberate action that would hinder the establishment of additional disposal capacity by the states and yet, consistent with NRC regulatory safety requirements, permit necessary operational flexibility by its licensees. It is with these points in mind that the following guidance is provided.

For proposed increases in storage capacity for low-level waste generated by normal reactor operation and maintenance at power reactor sites, the safety of the proposal must be evaluated by the licensee under the provisions of 10 CFR 50.59. If (1) your existing license conditions or technical specifications do not prohibit increased storage, (2) no unreviewed safety question exists, and (3) the proposed increased storage capacity does not exceed the generated waste projected for five years, the licensee may provide the added capacity, document the 50.59 evaluation and report it to the Commission annually or as specified in the license.

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Radiological safety guidance has been developed by the staff for the design and operation of interim contingency low-level waste storage facilities. Necessary design features and administrative controls will be dictated by such factors as the waste form, concentrations of radioactive material in individual waste containers, total amount of radioactivity to be stored, and retrievability of waste. A copy of the guidance document is enclosed with this letter. This guidance shall be used in the design, construction and operation of your storage facility. In addition, the NRC will judge the adequacy of your 50.59 evaluation based on your compliance with the guidance. Please note also that IE Circular No. 80-19, dated August 22, 1980, provides information on preparing 50.59 evaluations for changes to radioactive waste treatment systems.

If you determine that an unreviewed safety question exists, authority for use should be requested through application to the Office of Nuclear Material Safety and Safeguards (NMSS) pursuant to 10 CFR 30, accompanied by an environmental evaluation that considers the incremental impact as related to reactor operations. Such application for a separate Part 30 license is for the administrative convenience of the Commission and is not intended to be substantively different than an application for amendment of the facility operating license. Application for use should also be accompanied by a showing that the storage provisions will not impact on the safety of reactor operations and will not foreclose alternatives for disposal of the wastes.

NMSS will notice the receipt of application in the Federal Register, offer an opportunity for public hearing if significant public interest is demonstrated, and will perform an environmental assessment to determine if the proposed activity will significantly affect the quality of the environment. Facility construction prior to the staff's determination would be carried out at the licensee's risk. Any license issued will be for a standard five-year term, renewable if continued need is demonstrated and if safety of continued storage is established. NRC licensing jurisdiction will be retained in Agreement States in accordance with 10 CFR 150.15(a)(1) for storage of low-level waste generated and stored onsite. Indemnity coverage will be provided under and in accordance with your existing indemnity agreement with the Commission.

If it is determined that the storage provisions could impact on the safety of reactor operations or an existing license condition or technical specification limit on the amount of waste storage, a change in the conditions of the reactor facility license may be necessary.

The provisions for added capacity should be used only for interim contingency storage, and low-level wastes should continue to be shipped to disposal sites to the extent practicable. The "Low Level Radioactive Waste Policy Act" of 1980 gives primary responsibility for the disposal of low-level waste to the states. Some states have initiated disposal plans, and we believe it is important that power reactor licensees, as major waste generators, work with and provide technical assistance and other support to assist individual states or regions in developing new disposal sites. You are encouraged to take an active role in the development of additional disposal sites.

Some licensees are considering the installation of major volume reduction processes, e.g., incineration, dehydration, or crystallization to substantially reduce the volume of waste for disposal. You are encouraged to examine the costs and benefits of such processes for your operations. However, notwithstanding the use of volume reduction, you are also encouraged to take an active role in the development of additional disposal sites.

For proposed increases in storage capacity for more than five years (long-term), the application and review procedures will be pursuant to 10 CFR 30 with consideration of container integrity and retrievability, volume reduction, influence on state planning for disposal, and implications of de facto onsite disposal. Any long-term license issued will be for a five-year, renewable term.

If you have any questions about these matters, please let us know.

Sincerely,



William J. Dircks
Executive Director
for Operations

Enclosure:
Guidance Document

Enclosure

RADIOLOGICAL SAFETY GUIDANCE FOR ONSITE CONTINGENCY STORAGE CAPACITY

I. Introduction

The objective of this technical position is to provide guidance to licensees considering additional onsite low level radioactive waste storage capabilities. While it may be prudent and/or necessary to establish additional onsite storage capability, waste should not be placed in contingency storage if the ability to dispose of waste at a licensed disposal site exists. The shipping of waste at the earliest practicable time minimizes the need for eventual waste reprocessing due to possibly changing burial ground requirements, reduces occupational and non-occupational exposures and potential accident consequences, and in the event of burial ground closure, maximizes the amount of storage space available for use.

The duration of the intended storage, the type and form of waste, and the amount of radioactive material present will dictate the safeguards and the level of complexity required to assure public health and safety, and minimal risk to operating personnel. The longer the intended storage period, the greater the degree of controls that will be required for radiation protection and accident prevention. For purposes of this document, the duration of temporary waste storage is to be up to five (5) years. The magnitude of the onsite storage safety hazard is predicated on the type of waste being stored, the amount of radionuclides present, and how readily they might be transported into the environment. In general, it is preferable to store radioactive material in solid form. Under some circumstances, however, temporary storage in a liquid form may be desirable or required. The specific design and operation of any storage facility will be significantly influenced by the various waste forms, consequently, this document addresses wet waste, solidified wet waste and dry low level radioactive waste.

Guidance similar to that provided in this enclosure has been incorporated in NUREG-0800, NRC/NRR Standard Review Plan, July 1981, as Appendix 11.4-A to SRP 11.4, Solid Waste Management Systems.

II. General Information

Prior to any implementation of additional onsite storage, substantial safety review and environmental assessments should be conducted to assure adequate public health and safety and minimal environmental impact. The acceptance criteria and performance objectives of any proposed storage facility, or area, will need to meet minimal requirements in areas of design, operations, safety considerations and policy

considerations. For purposes of this technical position, the major emphasis will be on safety considerations in the storing, handling and eventual disposition of the radioactive waste. Design and operational acceptability will be based on minimal requirements which are defined in existing SRPs, Regulatory Guides, and industry standards for proper management of radioactive waste. Considerations for waste minimization and volume reduction will also have to be incorporated into an overall site waste management plan and the onsite storage alternative. Additional waste management considerations for ALARA, decontamination, and decommissioning of the temporary storage facility, including disposal, should be performed as early as possible because future requirements for waste forms may make stored wastes unacceptable for final disposition.

Facility design and operation should assure that radiological consequences of design basis events (fire, tornado, seismic event, flood) should not exceed a small fraction (10%) of 10 CFR Part 100, i.e., no more than a few rem whole body dose.

The added capacity would typically extend storage to accommodate no more than an amount of waste generated during a nominal five-year period. In addition, waste should not be stored for a duration that exceeds five-years. Storage of waste in excess of the quantities and duration described herein requires Part 30 licensing approval. The design capacity (ft³, Ci) should be determined from historical waste generation rates for the station, considering both volume minimization/reduction programs and the need for surge capacity due to operations which may generate unusually large amounts of waste.

The five-year period is sufficient to allow licensees to design and construct additional volume reduction facilities (incinerators, etc.), as necessary, and then process wastes that may have been stored during construction. Regional state compacts to create additional low-level waste disposal sites should also be established within the next five years.

III. Generally Applicable Guidance

- (a) The quantity of radioactive material allowed and the shielding configurations will be dictated by the dose rate criteria for both the site boundary and unrestricted areas onsite. The 40 CFR 190 limits will restrict the annual dose from direct radiation and effluent releases from all sources of uranium fuel cycle and 10 CFR Part 20.105 limits the exposure rates in unrestricted areas. Offsite doses from onsite storage must be sufficiently low to account for other uranium fuel cycle sources (e.g., an additional dose of ≤ 1 mrem/year is

not likely to cause the limits of 40 CFR 190 to be exceeded). Onsite dose limits associated with temporary storage will be controlled per 10 CFR Part 20 including the ALARA principal of 10 CFR 20.1.

- (b) Compatibility of the container materials with the waste forms and with environmental conditions external to the containers is necessary to prevent significant container corrosion. Container selection should be based on data which demonstrates minimal corrosion from the anticipated internal and external environment for a period well in excess of the planned storage duration. Container integrity after the period of storage should be sufficient to allow handling during transportation and disposal without container breach.

Gas generation from organic materials in waste containers can also lead to container breach and potentially flammable/explosive conditions. To minimize the number of potential problems, the waste form gas generation rates from radiolysis, biodegradation, or chemical reaction should be evaluated with respect to container breach and the creation of flammable/explosive conditions. Unless storage containers are equipped with special vent designs which allow depressurization and do not permit the migration of radioactive materials, resins highly loaded with radioactive material, such as BWR reactor water cleanup system resins, should not be stored for a period in excess of approximately one year.

A program of at least periodic (quarterly) visual inspection of container integrity (swelling, corrosion products, breach) should be performed. Inspection can be accomplished by use of TV monitors; by walk-throughs if storage facility layout, shielding, and the container-storage array permit; or by selecting waste containers that are representative of the types of waste and containers stored in the facility and placing them in a location specifically designed for inspection purposes. All inspection procedures developed should minimize occupational exposure. The use of high integrity containers (300 year lifetime design) would permit an inspection program of reduced scope.

- (c) If possible, the preferred location of the additional storage facility is inside the plant protected area. If adequate space in the protected area is not available, the storage facility should be placed on the plant site and both a physical security program (fence, locked and alarmed gates/doors, periodic patrols) and a restricted area for radiation protection purposes should be established. The facility should not be placed in a location that

requires transportation of the waste over public roads unless no other feasible alternatives exist. Any transportation over public roads must be conducted in accordance with NRC and DOT regulations.

(d) For low level dry waste and solidified waste storage:

1. Potential release pathways of all radionuclides present in the solidified waste form shall be monitored as per 10 CFR 50, Appendix A. Surveillance programs shall incorporate adequate methods for detecting failure of container integrity and measuring releases to the environment. For outside storage, periodic direct radiation and surface contamination monitoring shall be conducted to insure that levels are below limits specified in 10 CFR 20.202, 20.205, and 49 CFR 173.397. All containers should be decontaminated to these levels or below before storage.
2. Provisions should be incorporated for collecting liquid drainage including provisions for sampling all collected liquids. Routing of the collected liquids should be to radwaste systems if contamination is detected or to normal discharge pathways if the water ingress is from external sources and remains uncontaminated.
3. Waste stored in outside areas should be held securely by installed hold down systems. The hold down system should secure all containers during severe environmental conditions up to and including the design basis event for this waste storage facility.
4. Container integrity should be assured against corrosion from the external environment; external weather protection should be included where necessary and practical. Storage containers should be raised off storage pads where water accumulation can be expected to cause external corrosion and possible degradation of container integrity.
5. Total curie limits should be established based on the design of the storage area and the safety features provided.
6. Inventory records of waste types, contents, dates of storage, shipment, etc., should be maintained.

IV. Wet Radioactive Waste Storage

- (a) Wet radioactive waste will be defined as any liquid or liquid/solid slurry. For storage considerations, wet waste is further defined

as any waste which contains free liquid in amounts which exceed the requirements for burial as established by the burial ground licensing authority.

- (b) The facility supporting structure and tanks should be designed to prevent uncontrolled releases of radioactive materials due to spillage or accident conditions.
- (c) The following design objectives and criteria are applicable for wet radioactive waste storage facilities:
 1. Structures that house liquid radwaste storage tanks should be designed to seismic criteria as defined in Standard Review Plan (Section 11.2). Foundations and walls shall also be designed and fabricated to contain the liquid inventory which might be released during a container/tank failure.
 2. All tanks or containers should be designed to withstand the corrosive nature of the wet waste stored. The duration of storage under which the corrosive conditions exist shall also be considered in the design.
 3. All storage structures should have curbs or elevated thresholds with floor drains and sumps to safely collect wet waste assuming the failure of all tanks or containers. Provisions should be incorporated to remove spilled wet waste to the radwaste treatment systems.
 4. All tanks and containers shall have provisions to monitor liquid levels and to alarm potential overflow conditions.
 5. All potential release pathways of radionuclides (e.g., evolved gases, breach of container, etc.) shall be controlled, if feasible, and monitored as per 10 CFR 50, Appendix A (General Design Criteria 60 and 64). Surveillance programs should incorporate adequate methods for monitoring breach of container integrity or accidental releases.
 6. All temporarily stored wet waste will require additional reprocessing prior to shipment offsite; therefore, provisions should be established to integrate the required treatment with the waste processing and solidification systems. The interface and associated systems should be designed and tested in accordance with the codes and standards described in Standard Review Plan Section 11.

V. Solidified Radioactive Waste Storage

- (a) Solidified radwaste for storage purposes shall be defined as that waste which meets burial site solidified waste criteria. For purposes of this document, resins or filter sludges dewatered to the above criteria will be defined under this waste classification/criteria.
- (b) Any storage plans should address container protection as well as any reprocessing requirements for eventual shipment and burial.
- (c) Casks, tanks, and liners containing solidified radioactive waste should be designed with good engineering judgment to preclude or reduce the probability of occurrence of uncontrolled releases of radioactive materials due to handling, transportation or storage. Accident mitigation and control for design basis events (e.g., fire, flooding, tornadoes, etc.) must be evaluated and protected against unless otherwise justified.
- (d) The following design objectives and criteria are applicable for solidified waste storage containers and facilities:
 - 1. All solidified radwaste should be located in restricted areas where effective material control and accountability can be maintained. While structures are not required to meet seismic criteria, protection should be afforded to insure the radioactivity is contained safely by use of good engineering judgment, such as the use of curbs and drains to contain spills of dewatered resins or sludges.
 - 2. If liquids exist which are corrosive, proven provisions should be made to protect the container (i.e., special liners or coatings) and/or neutralize the excess liquids. If deemed appropriate and necessary, highly non-corrosive materials (e.g., stainless steel) should be used. Potential corrosion between the solid waste forms and the container should also be considered. In the case of dewatered resins, highly corrosive acids and bases can be generated which will significantly reduce the longevity of the container. The Process Control Program (PCP) should implement steps to assure the above does not occur; provisions on container material selection and precoating should be made to insure that container breach does not occur during temporary storage periods.
 - 3. Provision should be made for additional reprocessing or re-packaging due to container failure and/or, as required for

final transporting and burial as per DOT and burial site criteria. Contamination isolation and decontamination capabilities should be developed. When significant handling and personnel exposure can be anticipated, ALARA methodology should be incorporated as per Regulatory Guides 8.8 and 8.10.

4. Procedures should be developed and implemented for early detection, prevention and mitigation of accidents (e.g., fires). Storage areas and facility designs should incorporate good engineering features and capabilities for contingencies so as to handle accidents and provide safeguard systems such as fire detectors and suppression systems, (e.g., smoke detector and sprinklers). Personnel training and administrative procedures should be established to insure both control of radioactive materials and minimum personnel exposures. Fire suppression devices may not be necessary if combustible materials are minimal in the area.

V. Low Level Dry Waste Storage

- (a) Low level dry waste is classified as contaminated material (e.g., paper, trash, air filters) which contains radioactive material dispersed in small concentrations throughout large volumes of inert material and contains no free water. Generally, this consists of dry material such as rags, clothing, paper and small equipment (i.e., tools and instruments) which cannot be easily decontaminated.
- (b) Licensees should implement controls to segregate and minimize the generation of low level dry waste to lessen the impact on waste storage. Integration of Volume Reduction (VR) hardware should be considered to minimize the need for additional waste storage facilities.
- (c) The following design objectives and criteria are applicable for low level dry waste storage containers and facilities.
 1. All dry or compacted radwaste should be located in restricted areas where effective material control and accountability can be maintained. While structures are not required to meet seismic criteria, protection should be afforded to insure the radioactivity is contained safely by use of good engineering judgment.

2. The waste container should be designed to insure radioactive material containment during normal and abnormal occurrences. The waste container materials should not support combustion. The packaged material should not cause fires through spontaneous chemical reactions, retained heat, etc.
3. Containers should generally comply with the criteria of 10 CFR 71 and 49 CFR 170 to minimize the need for repackaging for shipment.
4. Increased container handling and personnel exposure can be anticipated, consequently, all ALARA methodology should be incorporated per Regulatory Guides 8.8 and 8.10.

March 31, 1987

To: The Senate Energy and Natural Resources Committee
From: Mark M. McDonald, Beloit, Kansas

Dear Senators:

I regret that I am unable to share my testimony with you in person today. I ask this testimony be given full consideration by this committee.

I speak in favor of Senate Bill #406 and urge its passage. The track record of radioactive waste disposal sites in the United States is dismal and every effort must be made to protect the Great State of Kansas, its land and its people from the ravages of a radioactive waste disposal disaster. This authority, composed of experts and citizens of Kansas would make protection of the people and our precious farmland paramount in formulating and implementing policies. The case of Fernald, Ohio, featured on ABC's 20/20 Thursday evening, March 26, 1987 is a perfect example of what Kansas must avoid. Briefly, in December, 1984 residents of Fernald learned that a nearby Feed Materials Production Center, which many believed produced farm related products was actually processing uranium to produce a feed material for use in ICBMs. They were informed that at least three wells had been contaminated with uranium. Numerous investigations revealed that during the plant's thirty years of operation, 250,000 pounds of uranium dust leaked, workers were exposed, safety measures were lax and that plant officials knew of potential water contamination from the waste pits since 1961. Those warnings were ignored and now the Fernald plant has become one of the most dangerous and largest radioactive waste dumps in the United States, as the pits have leaked into the Great Miami Aquifer. Unfortunately, the actual contents of these pits are unknown, and storage silos are leaking thorium and radon gas and are in poor condition. This plant is owned by the D.O.E. and until 1985 was operated by the National Lead of Ohio. Now, Westinghouse operates the plant and has pledged to do better. The D.O.E. continues to supervise the plant, and reports to itself. Senator John Glenn has proposed a bill having the E.P.A. and the D.O.E. monitor all nuclear sites. Unfortunately, no mention of these problems were made to Fernald residents until it was...**too late!** A state authority, in my opinion, would help avert a similiar incident from happening in Kansas. Do we want something like this happening in Kansas?

I also wish to speak in favor of House Bill #2108. Again, the poor track record of other radioactive waste dumps, including our dismal experience at the Furley site clearly demonstrate the need for this committee to **immediately** pass House Bill #2108. The State of Kansas depends heavily upon our underground water supplies, and we will be facing the crisis of all time should they become contaminated. Plain, honest-to-goodness common sense, previous experience and support from experts clearly state the need for this bill to pass. This bill must be passed in the Senate and onto Governor Hayden for his signature., and must be passed irregardless of Senate Bill #406. Come on, what are we waiting for?

I also wish to speak in favor of Senate Bill #114. Unless this compact and its members carefully reevaluate all data collected, and start over and become more responsive to the needs of the people, the State of Kansas still is in a very precarious position. While Mr. Raymond Peery, Executive Director of the Central Interstate Compact Low Level Radioactive Waste Compact Commission mentioned he will not

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suggest Kansas be chosen as the host state at a recent meeting in Beloit on March 18, 1987, by no means is this battle over for environmental survival. Little, if any mention was made with respect to agricultural significance in the Dames and Moore Phase I and II studies. Rural people have the same rights to live as do urban citizens, and because we choose to live in a rural area, we are no less important. Should Kansas lose its role as a leading agriculture producer because of the siting of a radioactive waste disposal in a prime farming area, the State of Kansas will be in **deep trouble!** I ask that this committee consult with Senator Paul Feliciano about other fairer, more equitable compact options before voting on Senate Bill #114.

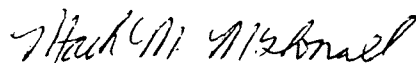
Now, it is time for the decisions. Is this committee, who has heard testimony from concerned people, experts and officials going to consider what the voters or the general public want, or is this committee going to opt for the slick-talk approach by the opponents or defeat these protective measures because of economics?

Eight thousand people made a sincere attempt to attend the recent meeting conducted by the Compact Commission on March 18, 1987 at Beloit. In a dignified, orderly manner they demonstrated their concern and love for the **fine quality of life** and **agricultural significance** of Kansas and also voiced the opposition to the selection of Kansas as the host state for the regional radioactive waste dump. Since people from all areas of Kansas were present, isn't this **sufficient proof** for this committee to endorse Senate Bills #406, #114 and House Bill #2108 before it's **too late?**

It will not be easy for us and future generations to live with a radioactive waste **mess** created because we failed to take prudent, decisive action on these critical bills. On behalf of the people, future generations and our precious farmland, I beg you to leave behind a legacy of foresight, common sense and **good stewardship** by voting in favor of these bills so that our children and grandchildren in years to come will be proud of the manner we dealt with this problem. Let's not, in the future, look back and say "Well, you know we should have acted to create the regulating authority, formulate another, more fair compact and ban underground burial of these **forever foul** substances back in 1987 when we had the **perfect opportunity** to do so." Now what is your vote?

In closing, my prayers are with all of you as you make these very important decisions. I encourage you to seek God's guidance before casting your vote. Scripture (Psalm 24:1-2) states "The earth is the Lord's and everything in it, the world, and all who live in it; for he founded it upon the seas and established it upon the waters." N.I.V. May God be with you as you make these decisions, and God gives His best to those who leave the choice with Him. Thank you very much.

Sincerely yours,



Mark M. McDonald

Sources of Information

The information regarding the Fernald, Ohio was obtained through watching the segment of ABC's 20/20 program aired on Thursday evening, March 26, 1987.

The scriptural quotation was taken from the Holy Bible, New International Version page 512. Zondervan Publishing Corporation, 1978.

TO: SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES

*Testimony of Stephen W. Boyda
Attorney at Law*

*Appearing on behalf of the
Marshall County Commissioners
on March 31, 1987*

Honorable Members of the Senate Committee

Thank you for the opportunity to address the Committee this morning. My Name is Steve Boyda. I am a lawyer in Marysville, Kansas. I am among the third generation of my family to stay and live in Kansas. I represent the Marshall County Commission, many residents of Northeast Kansas and my own ideals of what kind of legacy I wish to pass on to my five children and yours.

Let's get to the point.....We support SB 406 to establish an authority to direct radioactive waste disposal of Kansas waste, but with the express understanding that we withdraw from the Compact immediately. WHY!!!!!!!!!!

It's simple, Kansas is getting a raw deal. The Compact represents a contract between five individual states and an entity we call the Compact. This contract requires the parties to act in good faith and perform certain obligations at certain times. To date, Kansas has acted in good faith and has met all requirements. We've made available resources, information and manpower, recognizing that if selected as the host state, an awesome responsibility awaits us.

Our commitment upon selection is binding upon our people, our government, our transportation systems and our natural resources for a minimum of 6 generations. This commitment must not be made lightly or under the guise of political expediency.

Before we are bound to such a lasting obligation the compact must properly perform its responsibilities. Would you agree that the compact is obligated to do the following?

1. That the Compact should function to adequately inform citizens of the respective states of the goals and objectives of the compact, allow for public input, and set up a timetable for reasonable response, not political brinkmanship that we are witnessing here.

2. That the technologies sought should reflect a commitment to avoid the disastrous consequences suffered by the people and water resources contaminated at Sheffield, Illinois; West Valley, New York; and Maxey Flats, Kentucky.

3. That the site selection process should protect against recommendations which are unsuitable and inappropriate and unfair.

4. That the current inventories and projected production figures for radioactive waste be reasonably correct to project the host state's responsibility for liability to exposure during transportation, handling and storage to people and natural resources.

The Compact must fulfill its obligations, if not, it has failed to earn the commitment asked of us.

It is our opinion that the Compact has failed miserably, that the contract has been breached.

First, on point one, the compact conveniently provides for a "pass the buck" system that stymies public input. Look at our current time table. Despite repeated criticisms, as shown in the minutes, public hearings were not scheduled until late in the process, with only minimal notice and set at the eleventh hour with immediate deadlines staring us in the face.

Consider further, the Compact has adopted a delegated system whereby the Compact selects a developer, who may or may not use site recommendations in selecting the host

state. This approach gets us so far down the road that public officials can claim they are powerless in changing anything. The Compact claims its a contractual arrangement they must abide by, and the host state is told that it must not be more restrictive than the terms agreed to by the commission members long months ago. An arrangement the state has agreed to accept.

And so it goes. Mr. Peery has publically courted and threatened the citizens of this state with alternate promises of "economic development" or lawsuits if we didn't "handle it right". We've heard promises that it would not be in "this state" (on tape from Beloit meeting) to denials in other states that such statements were made. In Arkansas, the word is that the dump will go to Kansas, most likely the salt mines.

You be the judge, does this conduct square with the contractual expectations you have? Is this a breach of the trust we placed in the Compact and its administrators?

Second, "appropriate technology" seems to be the catch phrase separating those of us who are layman and those who claim to be experts in the field of waste disposal.

At the other six sites the technology was called "shallow land burial," an appropriate technology the generators and developers used to convey assurances to the people and their officials that public safety and protection against contamination was a priority, that our trust could be assured.

Take a look at the "shallow land burial" technology of Maxey Flats, Ky.

Now we are told that the experts will solicit a "new and improved technology" called "enhanced shallow land burial." We are told that state of the art technology will

now protect our ground water at 40 feet below the surface, that 30 inches or of rainfall can be managed for the next 6 generations.

The record of failure of past technology to date for the four sites similiar in climate to ours is three out of four, that's a 75% failure rate!

The Compact Site Suitability Study permits burial in areas where the water table is 40 feet from the surface. Many selected areas are much less than that.

Generators and developers prefer shallow land burial.

You be the judge, does this kind of technology square with the contractual expectations you have? Are you ready to permit the compact to test its new technologies on Kansas soil, above Kansas water? State of the art common horse sense says, NO!!!

What ever happened to our ban on burial? We agree with the Attorney General Stephan that burial is a throwback to an approach of the darkages.

Related to this point is an understanding of the substances we're dealing with. Promoters would have you believe that we are childishly neglecting our responsibility in not wanting to bury our hospital gloves and gowns which are radioactive for only a few days.

As Paul Harvey would say, the "rest of the story" is that gloves and gowns represent only 5-6 % of the total so called "low level" waste. Nuclear reactors represent 94%. We have only one. We would be accepting nuclear reactor waste from six other nuclear power plants, including the possibility as outlined in the report of having to store the remains of the seven reactor facilities when they are dismantled, all within the first 30 years of the operation of the site.

When officials are asked, "How dangerous to humans or natural resources is the highest of the low level?" The answer was "state of the art" is about 300 to 350 years, but regulations say we only have to supervise the site for 100 years after the developer leaves. That's 30 plus five, if it is closed in 30 years.

Approximately 24% of the reactor waste is categorized in the highest of the low level.

You be the judge, this is your state, these are your neighbors, your land and water. Is continued advocacy of burial of any kind above our water rational, does it deserve our trust and committment for 6 generations?

With nuclear waste there is more to fear than fear itself. It is absolute insanity to discredit those who call for responsible, considered and careful handling of these dangerous substanses that we leave as a legacy of our "progress."

A kicker to this point is the fact that Mr. Peery admitted in Beloit that a mere change in federal regulations could upgrade this site to a high level site that's the real "hot stuff" that is dangerous for 400 generations, that's 24,000 years to half life, dangerous by some predictions for maybe as long as 250,000 years.

That's why the people of Washington State finally got sick and tired of being the dumping ground and passed a voter referendum outlawing burial in their state. It's in the Courts now. Do we want to have to test a referendum after the fact?

Would it surprise you to learn that Mr. Peery also admitted that the site could be enlarged far beyond the initial site size and could be open far beyond the thirty years being suggested now?

You be the judge, do these facts square with the expectations you have for the committment being asked of Kansas?

Third, whatelse can be said of the Dames and Moore Suitability Study?

Our Kansas geologists have truthfully and wisely done their jobs. Mr. Wilson's memo of June, 1985, and Mr. Steeples testimony should convince you that the selection process was poorly done, used old data, is unreliable and

falls far short of meeting any standard sufficient to be worthy of our trust. Even Mr. Peery has alluded to a recommendation that the Compact disregard Phase II of the report.

Does Mr. Peery forget that Mr. Wilson's comments were directed to Phase I, which it appears he still intends to rely upon. Do we in fact have a site study?

Did you know that Mr. Peery was the Project Manager for the Suitability Study for the Compact?

You be the judge, does the Suitability Study prepared by Dames and Moore for which Mr. Peery was Project Manager square with the contractual expectations the Compact must live up to? Is this a breach of our trust and the contract terms by the compact and its administrators? Are you ready to commit us for 6 generations?

Fourth, let's consider the volume of waste currently on hand and projected for the foreseeable future. Any reasonable man would plan the future operation of the site based on fair and accurate information of the waste volume.

The Dames and Moore Report under the compact project management of Mr. Peery says Oklahoma will produce annually approximately 5,179 cu. feet of waste with projections at not more than 10,000 cu. feet per year.

This representation appears to be totally inaccurate. Please examine with me the report from the Arkansas Alliance. This report indicates that Oklahoma has more than 2,360,000 cu. feet of radioactive waste awaiting disposal in the compact dump. Mr. Peery has claimed he was unaware of this fact. Review with me the facts and figures. Review with me the intentions of the producers of this waste.

Whatever happen to reliance on accurate information? Whatever happen to good faith of the parties to the compact contract? Whatever happen to the committment made to earn our trust? Whatever happen to the Project Manager and the lack of response, even now, in providing accurate information?

Are you ready to open Kansas as a dumping ground for 2,360,000 cu. feet of current radioactive inventory and 20,000 to 40,000 feet of radioactive production annually from Oklahoma?

You be the judge, has the compact betrayed our trust? Have we been given incorrect figures? Are you ready to commit Kansas, our people and natural resources for 6 generations in the face of this information?

Please listen, when we say that thousands of Kansans are depending upon you. Please listen, when we say that our trust is in this body.

Rumors abound within the halls of this institution that this legislation is merely a disguise for public consumption, that given time the protesters will retreat, and that this legislation SB 406 will come out of Committee providing the authority for the compact site.

We trust these are merely rumors and that such a cruel hoax will not be played out in this body.

Our trust in you is no different than the trust that we placed in the compact.

In this, the two-hundredth year of our Constitution, the people expect no more, nor deserve less than your dedication and support as stewards of this great State with a commitment to leave our future generations a legacy that says we were a people who cared.

Respectfully Submitted,

Stephen W. Boyda, Attorney

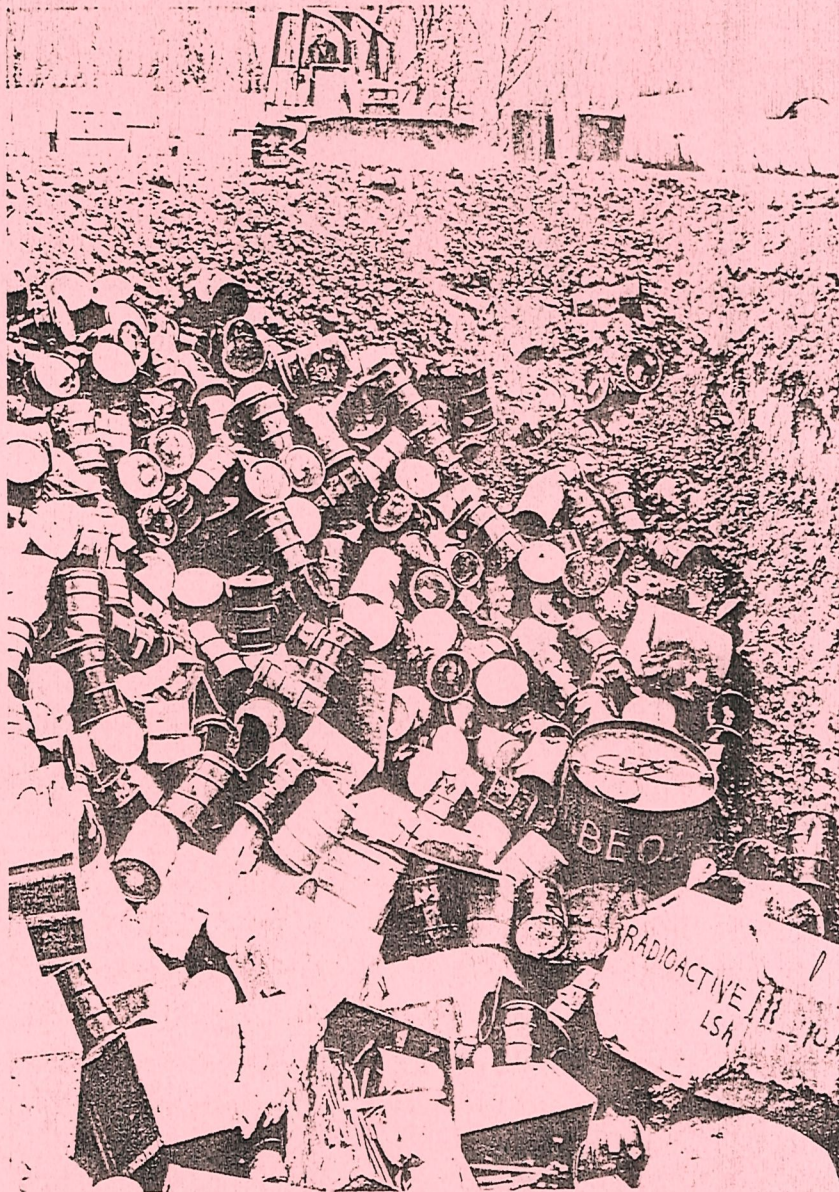


Figure 4-7. Disposal of Low Level Radioactive Wastes in a Shallow Burial Trench at the Maxey Flats, Kentucky, Disposal Site.

Source: Ron Garrison, Lexington *Herald-Leader*.

on processes,

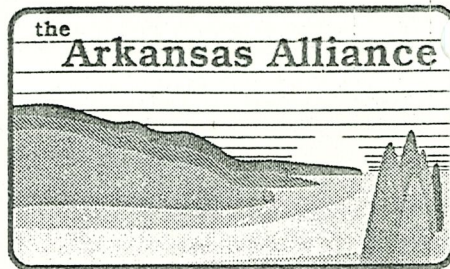
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8015 Brandon Street • Little Rock, Arkansas 72204 • 565-3581
1039 Overcrest Street • Fayetteville, Arkansas 72701 • 442-7423

March 25, 1987

Steve Boyda
Box 207
Marysville, Kansas 66508

Dear Steve:

I'm enclosing a press release and a copy of a letter to Gov. Clinton regarding the Oklahoma waste stream. After this was issued, we received a call from Mr. McCord of the OK Dept. of Health apologizing for his error and admitting that about 50,000 ft. had been shipped in '86. We also confirmed this information with Mr. Stauter of Kerr-McGee.

waste
I've been unable to find in our files our copy of the *Comprehensive Solid* Environmental Impact statement from Sequoyah Fuels Corp. at Gore, OK which details the 2,000,000+ ft. of r-a sludge they have there. He said that they plan to de-water this sludge and reduce the quantity to about 20% of its present volume and that this will be shipped to the LLWD of our Compact when it is established. He also stated that they will continue to generate 20-40,000 ft. of this material annually which will also go to the LLWD.

We find it remarkable that Dames and Moore were unaware of or chose to ignore this information which places OK at the top volume of waste generators in our Compact.

We can obtain another copy of the Seq. Fuels information (I think we loaned our copy to Sen. Jim Scott), but can't have it in time for your meeting with your A.G. Much of the material shipped from OK to Richland contained transuranics at such a level that it was refused at Beatty. This material, or some of it, came from the Kerr-McGee Cimarron plant which was being cleaned up at that time. The K-M plant at Gore, OK makes Uranium Hexafluoride (and now UF⁶) and the sludges are high in uranium content.

We feel that much of the Dames & Moore studies is fatally flawed and hope it can be challenged in some way to put the whole Compact process back to square 1.

Please share this information with _____ let us know of any developments up there and we'll keep you all informed about AR progress.

Regina Groshong
Regina Groshong

a non-profit environmental coalition sponsored by

- Arkansas Peace Center • Sierra Club • Carpenter's Local 1836 AFL-CIO •
- International Brotherhood of Electrical Worker's Local 700 AFL-CIO • Arkansas Community Organizations for Reform Now •
- Office of Justice and Peace Catholic Diocese of Little Rock • UALR Coalition for Peace & Justice • and others •

the Arkansas Alliance

8015 Brandon St. (565-3586)
Little Rock, AR 72204

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Little Rock
Coalition
for Peace
& Justice
USA
and
others

Feb. 18, 1987

News Release - for Immediate Release

Contact: Bob Bland
565-3581

ENVIRONMENTAL GROUP CALLS FOR INVESTIGATION OF 'OKLAHOMA CONNECTION'

The environmental action group Arkansas Alliance today asked Governor Bill Clinton to investigate reports that Oklahoma has been generating and shipping out of the state far greater volumes of low-level radioactive waste than has been reported or predicted, and that this questions the validity of the Central Interstate Compact Commission. Arkansas, Kansas, Nebraska and Louisiana are the other members of the five state group.

The Alliance said that the U.S. Department of Energy records indicate that Oklahoma shipped over 50,000 cubic feet of low-level radioactive waste to three disposal facilities in the U.S. in 1986, but that Compact officials and a radiological control officer for the Oklahoma Department of Health have denied and disputed these shipment records.

In a statement, the Alliance said "The report that Oklahoma shipped 2½ times more waste than any other Compact state in 1986, when it was supposed to be one of the smallest waste generators according to the Compact engineers Dames & Moore, questions the accuracy, fairness and feasibility of the entire Compact planning process. It is also not reassuring to have the Oklahoma Department of Health dispute this information and offer no answers on where this waste has been generated in Oklahoma."

"In addition to this discrepancy, the fact that the Kerr-McGee facility currently has at least 2,360,000 cubic feet of radioactive sludge stored in open ponds near Gore, OK raises an ominous question. Although Kerr-McGee contends it will process this at a mill, it is possible that a large portion of this material could be shipped to the Central Interstate disposal facility. This could completely overwhelm and unhinge the dump site - imagine 4,000 huge dump trucks loaded with this material descending on some unsuspecting community in one of our states!"

(more)

The Alliance asked Gov. Clinton for an "urgent" investigation of the matter, since "legislative acts are pending" in Arkansas, Kansas and Nebraska that will be affected by any information that may come from this investigation.

The Alliance also stated that the fact that Oklahoma, which it says may be the largest waste generator in the five states, has no "preferred siting areas" whereas all the other states have at least one, raises the issue of fairness. The Alliance says that in the other Compacts developing around the country it is generally assumed that the largest waste generator in the Compact in all fairness should accept the designation of being the first "host" state for the first disposal site.

-30-

Sources for above information:

- * Information on Department of Energy reports -
State of Washington Department of Ecology
Elaine Carlin's office. Stephanie Ko.
Telephone (206) 459-6862 (Olympia, WA)
- * Further verification of above:
Ed Helminski, The Radioactive Exchange
P.O. Box 9528, Washington, D.C. 20016
Telephone (202) 362-9756
- * Dale McCord, Oklahoma Department of Health
Telephone (405) 271-5221, Oklahoma City, OK.
McCord is radiation control officer in OK
and was referred to us by Dr. Phyllis Garnett,
Arkansas Commission member and Director of
Pollution Control & Ecology Commission.
- * Information on Kerr-McGee - John C. Stauter,
Director Nuclear Licensing & Regulation
Telephone (405) 270-2623 Oklahoma City. Also
W.T. Crowe, Acting Chief, NRC Uranium Fuel
Licensing , , Washington, D.C.

The Arkansas Alliance

8015 Brandon St. (563-3581)
Little Rock, AR 72204

February 18, 1987

Honorable Bill Clinton
Governor of Arkansas
State Capitol
Little Rock, Arkansas

Dear Gov. Clinton:

You are aware of our concern about the Central Interstate Compact Commission. We have expressed to your office numerous misgivings about the workings of this Commission and the conduct and performance of your appointed members of this Commission.

A new and most serious concern of all has now arisen.

We received information that the State of Oklahoma, one of the five members of our Compact, in 1986 shipped low-level radioactive waste to the three operating sites in the U.S. over ten times the volume that had been predicted by Dames & Moore, the engineers hired by our Compact to make all the studies and predictions for the planning of our regional facility.

We sent a letter to Dr. Phyllis Garnett asking for information in this matter and she replied that these volumes from Oklahoma "are not confirmed by Dale McCord of the Oklahoma Department of Health."

We called Mr. McCord and he denied that any such volumes of such waste had been shipped from Oklahoma during 1986. He pointed out that this approximated 7,000 barrels, and he was emphatic that this report had to be in error. He invited us to submit evidence of this report to him.

We contacted the State of Washington Department of Ecology in Olympia, Washington and spoke to the office that supervises the Richland, WA waste facility. Ms. Stephanie Ko of that office (Telephone (206) 459-6862) stated that their records showed the following shipments of low level radioactive waste from the State of Oklahoma in 1986 to the following disposal sites:

- Shipped to Richland, Washington - 31,245 cu. ft.
(equivalent 4,166 55 gal barrels)
- Shipped to Barnwell, So. Car. - 10,920 " " (thru Sept. only)
(equivalent 1,456 55 gal. barrels)
- Shipped to Beatty, Nevada - 7,795 " "
(equivalent 1,039 55 gal. barrels)

Total..... 49,960 cu. ft.

Since this does not include three months of shipments to Barnwell, it is very likely that the Oklahoma amount topped 50,000 cu. ft.

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 and
 others

and very close to the 7,000 barrels figure. Dames & Moore had predicted an average of 5,179 cu. ft. per year from Oklahoma.

In addition to this discrepancy, Mr. McCord confirmed the existence of two million cu. ft. of "inventory" low-level radioactive sludge now being held at the Sequoyah Fuels facility owned by Kerr-McGee at Gore, Oklahoma and invited us to direct any questions about this to Mr. John C. Stauter of the Kerr-McGee firm in Oklahoma (Telephone (405) 270-2623).

Mr. Stauter told us that he had informed the Nuclear Regulatory Commission in a letter dated Nov. 14, 1986 and addressed to William Crowe that Kerr-McGee would make an effort to reduce this quantity of waste by reclamation efforts and incineration, etc. but that it would eventually be disposed of at the Central Interstate Compact Commission disposal facility.

We spoke with Raymond Peery, Executive Director of the Compact Commission in Atlanta and he denied any knowledge of this quantity of waste in Oklahoma and suggested that I call the Oklahoma sources myself, which I have reported on above.

It is obvious that this situation indicates a serious problem with the reliability of the planning data submitted by Dames & Moore. It also indicates a grievous lack of professionalism and diligence in the Compact office and the people you have appointed to represent Arkansas on this Commission.

It seems possible that Oklahoma may be far and away the heaviest low-level radioactive waste generator in the five states and this possibility has gone undetected by the Compact Commission. In addition, Oklahoma does not have any "preferred siting areas" in the Phase II Dames and Moore report. This is a most unfair situation that makes the "Compact" a mockery.

This information is not yet known to the legislators or other governors in the five states. It will very likely have a profound effect on the legislation concerning the Compact now pending in three of those states.

We respectfully and urgently ask that you investigate this matter and clarify this Oklahoma question. We ask that you help us find out precisely where this material originated from in Oklahoma and why the Oklahoma Department of Health had no knowledge of such a substantial shipment of waste. We ask you to inquire of your appointed representatives, Dr. Garnett and Ms. Dicus, as to why the Compact Commission could be so uninformed in such a vital matter and further why they did not pursue the matter when the question was first asked. All of these questions go double of course to Mr. Raymond Peery.

Since so many legislative acts are pending on this important situation, we respectfully ask you to consider our request as soon as is practicable. Thank you for your assistance,


Bob Bland, Managing Board

LLRW Volume Disposal Update

LLRW ACCEPTED FOR DISPOSAL AT BARNWELL, BEATTY AND HANFORD

Through December 1986

(Volumes in Cubic Feet)

	<u>December</u>	<u>Year to Date</u>		<u>December</u>	<u>Year to Date</u>
Northeast			Rocky Mountain		
Connecticut	3,650.20	54,713.11	Colorado	0.00	1,072.60
New Jersey	13,314.70	53,387.38	Nevada	0.00	0.00
	<u>16,964.90</u>	<u>108,100.49</u>	New Mexico	0.00	0.00
			Wyoming	0.00	0.00
				<u>0.00</u>	<u>1,072.60</u>
Appalachian			Western III		
Pennsylvania	16,620.40	188,695.42	South Dakota	0.00	7.50
West Virginia	0.00	0.00	Arizona	0.00	4,788.50
Maryland	5,141.50	14,742.65		<u>0.00</u>	<u>4,796.00</u>
Delaware	0.00	1,158.62			
	<u>21,761.90</u>	<u>204,596.69</u>			
Southeast			Northwest		
Georgia	5,060.00	48,847.50	Idaho	0.00	0.00
Florida	14,336.50	58,847.00	Washington	3,002.00	52,986.57
Tennessee	21,725.50	84,337.05	Oregon	8,098.20	108,982.81
Alabama	11,592.60	57,269.30	Utah	660.00	3,405.00
N. Carolina	8,408.30	81,578.81	Alaska	0.00	0.00
S. Carolina	12,912.40	122,819.25	Hawaii	0.00	2,028.84
Mississippi	2,187.00	15,813.50	Montana	0.00	591.00
Virginia	4,746.10	70,688.23		<u>11,760.20</u>	<u>167,994.22</u>
	<u>80,968.40</u>	<u>540,200.64</u>			
Central States			Unaligned		
Arkansas	0.00	4,473.80	Rhode Island	19.00	347.95
Louisiana	2,740.00	23,514.10	Vermont	1,445.00	11,752.50
Nebraska	1,322.00	20,341.50	New Hampshire	0.00	3,491.90
Kansas	4,663.50	6,575.00	Maine	875.50	6,953.50
Oklahoma	7,057.50	49,815.00	New York	7,169.30	112,077.42
	<u>15,783.00</u>	<u>104,719.40</u>	Massachusetts	6,230.30	67,695.27
			Texas	1,780.00	3,328.90
Central Midwest			North Dakota	0.00	0.00
Illinois	38,876.10	245,086.26	California	16,646.30	114,013.70
Kentucky	0.00	3,788.71	D.C.	0.00	229.53
	<u>38,876.10</u>	<u>248,874.97</u>		<u>34,165.40</u>	<u>319,890.67</u>
Midwest			TOTAL:	230,797.65	1,812,243.05
Wisconsin	0.00	5,832.90	(As reported 1/1/87)		
Indiana	0.00	0.00	NOVEMBER:	161,020.85	1,582,188.57
Iowa	2,257.50	9,960.10			
Ohio	118.05	15,587.95			
Michigan	2,298.00	38,595.91			
Minnesota	966.90	28,060.50			
Missouri	4,877.30	13,960.00			
	<u>10,517.75</u>	<u>111,997.36</u>			

W Volume Disposal Update

LLRW ACCEPTED FOR DISPOSAL AT BARNWELL, BEATTY AND HANFORD

Through January 1987

(Volumes in Cubic Feet)

January

January

Northeast		Rocky Mountain	
Connecticut	2,174.90	Colorado	0.00
New Jersey	723.20	Nevada	0.00
	<u>2,898.10</u>	New Mexico	0.00
		Wyoming	0.00
Appalachian			<u>0.00</u>
Pennsylvania	8,064.50	Western III	
West Virginia	0.00	South Dakota	0.00
Maryland	0.00	Arizona	0.00
Delaware	0.00		<u>0.00</u>
	<u>8,064.50</u>		
Southeast		Northwest	
Georgia	913.00	Idaho	0.00
Florida	12,347.20	Washington	6,458.00
Tennessee	8,444.40	Oregon	8,366.20
Alabama	5,026.50	Utah	0.00
N. Carolina	6,394.80	Alaska	0.00
S. Carolina	6,858.60	Hawaii	573.80
Mississippi	1,766.00	Montana	0.00
Virginia	2,055.10		<u>15,398.00</u>
	<u>43,805.60</u>		
Central States		Unaligned	
Arkansas	0.00	Rhode Island	114.10
Louisiana	1,552.00	Vermont	0.00
Nebraska	3,359.00	New Hampshire	87.00
Kansas	622.50	Maine	0.00
Oklahoma	7,567.50	New York	1,880.70
	<u>13,101.00</u>	Massachusetts	2,202.80
		Texas	0.00
Central Midwest		North Dakota	0.00
Illinois	17,830.40	California	5,973.60
Kentucky	0.00	Puerto Rico	0.00
	<u>17,830.40</u>	D.C.	0.00
			<u>10,258.20</u>
Midwest		TOTAL:	116,791.10
Wisconsin	176.00		
Indiana	0.00		
Iowa	1,351.00		
Ohio	998.00		
Michigan	919.50		
Minnesota	1,262.80		
Missouri	728.00		
	<u>5,435.30</u>		

SB406

3/29/87
3/31/87

My name is Terry D. Tait. I am the manager of the Nuclear Energy Low-Level Waste Management Program for EG&G Idaho, Inc. EG&G Idaho is a prime contractor to the Department of Energy. My organization is responsible for assisting the Department in implementing its responsibilities assigned by the Low-Level Radioactive Waste Policy Amendments Act of 1985. My brief remarks today represent my personal professional opinions and should not be construed as necessarily representing or establishing policies of the United States Department of Energy.

The 1980 Low-Level Radioactive Waste Policy Act established as Federal policy that each "state was responsible for providing for the 'disposal' (not 'storage') of low-level radioactive waste generated within its borders, except for certain low-level radioactive wastes generated by activities of the Federal government." The Act further stated that such "... low-level radioactive waste can be most safely and efficiently managed on a regional basis" and it authorized and encouraged states to enter into interstate compacts to provide for the establishment and operation of regional LLW disposal facilities.

The Low-Level Radioactive Waste Policy Amendments Act of 1985 reaffirmed these Federal policies and provided a series of milestones, incentives, and penalties to encourage states and compact regions to fulfill their responsibilities to safely dispose of the low-level radioactive wastes generated within their states.

(6)
G
Energy
3-31-87

Statement of the Honorable Governor

Before passing any legislation that would effectively result in the withdrawal of the State of Kansas from the Central Interstate Compact, I would strongly encourage the legislature to examine closely the issues and ramifications of "going it alone." The state will still be responsible for providing for the disposal (not storage) of the low-level radioactive waste generated within the state in accordance with the milestone schedule established in the Low-Level Radioactive Waste Policy Amendments Act. Failure to meet these mandated milestones could result in Kansas generators losing access to the three existing low-level waste disposal operating sites and eventually the state could be required to take title to and possession of all such generated waste until a disposal facility is available. Other major issues to consider include the right of a state to exclude the disposal of low-level radioactive waste generated outside the state and the economics and safety of small volume disposal facilities.

I thank you for the opportunity to make this brief statement and I would be glad to answer any questions from the committee at this time. If there are none, I will be available throughout the day to respond to any committee inquiries.