NUCLEAR REGULATORY COMMISSION

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COMMISSION MEETING

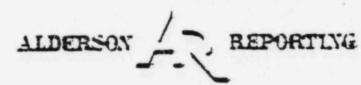
In the Matter of: PUBLIC MEETING

DISCUSSION OF 10 CFR PART 61 "LICENSING REQUIREMENTS FOR LAND DISPOSAL OF RADIO-ACTIVE WASTE" FINAL RULE

(WITH VIEWGRAPHS)

DATE: October 22, 1982 PAGES: 1 - 65

AT: Washington, D. C.



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1	UNITED STATES OF AMERICA
2	NUCLEAR REGULATORY COMMISSION
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4	DISCUSSION OF 10 CFR PART 61
5	"LICENSING REQUIREMENTS FOR LAND DISPOSAL
6	OF RADIDACTIVE WASTE"
7	FINAL RULE
8	
9	PUBLIC MEETING
10	Nuclear Regulatory Commission Room 1130
11	1717 H Street, N. W.
	Washington, D. C.
12	Friday, October 22, 1982
13	The Commission convened, pursuant to notice, at
14	10:05 a.m.
15	
	COMMISSIONERS PRESENT:
16	NUNZIO PALLADINO, Chairman of the Commission
17	VICTOR GILINSKY, Commissioner JOHN AHEARNE, Commissioner
18	THOMAS ROBERTS, Commissioner JAMES ASSELSTINE, Commissioner
19	STAFF AND PRESENTERS SEATED AT COMMISSION TABLE:
20	II DIROYA
	W. DIRCKS J. ZERBE
21	J. MARTIN
22	D. SMITH
	R. BROWNLEE
23	R. CUNNINGHAM S. TRUEBATCH
24	
25	

## DISCLAIMER

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## 1 PROCEEDINGS

- 2 CHAIRMAN PALLADINO: Good morning, ladies and
- 3 gentlemen.
- 4 The Commission meets this morning to hear a
- 5 discussion from the staff on the final rule for low
- 6 level waste disposal, 10 CFR Part 61. The Commission
- 7 last met on this subject in July of this year. The
- 8 purposes of today's meeting are to receive any update or
- g new information since the last meeting, and to answer
- 10 Commissioner questions that remain, so that we can
- 11 proceed, hopefully, to vote on the rule.
- 12 Do any of my fellow Commissioners have opening
- 13 remarks?
- 14 COMMISSIONER AHEARNE: No.
- 15 CHAIRMAN PALLADINO: If not, let me turn the
- 16 meeting over to Mr. Dircks.
- 17 MR. DIRCKS: This is one of those
- 18 long-standing activities we have been engaged in for
- 19 many years. It started off, actually, when I was
- 20 Director of NMSS, and I am happy to see that it has
- 21 progressed to where we have it today.
- 22 We are asking Commission approval to issue it
- 23 in final form. As you have mentioned, we have had
- 24 meetings on it with the Commission, and we have met with
- 25 individual Commissioners. We have gone through a round

- 1 of public comment. We have had Dale Smith, who has made
- 2 a career out of it and now has moved on to head-up our
- 3 Denver office, but he has graciously come back to go
- 4 through it again, with you. Jack, of course, has
- 5 followed it as long as any one of us has.
- 6 Jack, do you want to make a few points, and
- 7 then Dale can go through the details of the thing. I
- a suppose, if you want to ask my involvement, I will have
- g to scratch my head because it has been so many years
- 10 since I have been involved in the details of it.
- 11 MR. MARTIN: I think what we want to do today
- 12 is just very, very briefly review how we got to where we
- 13 are, and deal with the comments that we have got from
- 14 the last meeting, then, we also have with some of you
- 15 individually.
- 16 There have been a couple of letters come in
- 17 since the last meeting. We will just try to bring
- 18 everyone up to date as to what has happened as a result
- 19 of the last meeting, and what has happened since the
- 20 last meeting, and deal with comments and any further
- 21 questions.
- 22 At this point, I think, Dale, will you just
- 23 walk through the slides?
- MR. SMITH: Okay, thank you.
- 25 I think you all have the handout material that

- 1 we sent down.
- 2 COMMISSIONER AHEARNE: Has this also been
- 3 distributed to the audience?
- 4 MR. SMITH: Yes, I think they have also been
- 5 made available to the rest of the group here.
- 8 On the slide No. 2, this simply gives us a
- 7 recap of the chronology. We are at the point where we
- g have briefed the Commission earlier, in July. We
- g responded to several questions and comments that arose
  - 10 as a result of that.
  - 11 We have also, through staff initiative and
  - 12 through some outside influences, examined a few issues,
  - 13 and it is those issues that I would like to address this
  - 14 morning.
  - 15 Generally, the reaction from the public to the
  - 16 publication of 82-204, the staff paper that presents the
  - 17 rule in its proposed final form, has been mixed. We
  - 18 have had very little actualy public comment or follow-up
  - 19 concerns. The few that have been expressed were
  - 20 addressed.
  - 21 There does appear to be a very high level of
  - 22 interest from the people that we have talked with. The
  - 23 people we normally contact to do business with,
  - 24 industry, the universities, the State people, all are
- 25 concerned and interested as to when the rule will be

- 1 out, and that we can get on with it.
- 2 COMMISSIONER AHEARNE: In fact, haven't we
- 3 received at least one formal expression from a group of
- 4 states, the States Conference, requesting us to?
- 5 COMMISSIONER GILINSKY: Requesting what?
- 6 COMMISSIONER AHEARNE: That we move forward
- 7 with the rule.
- 8 MR. MAFTIN: The Western Governors Association
- g recently did.
- 10 MR. SMITH: In general, the things that we
- 11 have looked at since we last talked turned out to be
- 12 issues that were not necessarily new. They were things
- 13 that we had considered, but perhaps we needed to take a
- 14 second look at, with an eye towards clarification and
- 15 reexamination of these issues.
- 16 As I mentiond, these things came about not
- 17 only as a result not only of our our presentation to the
- 18 Commission and discussion related to that, but also
- 19 outside people from industry.
- 20 COMMISSIONER ROBERTS: Could you give us
- 21 examples of editorial and clarifying changes?
- MR. SMITH: Yes, I can, and I think that as we
- 23 go through there will be some examples. For example, in
- . 24 the environmental impact, and we transmitted the changes
  - 25 down to you, we have a number of pen and ink changes to

- 1 show clarification in language, things that just weren't
- 3 COMMISSIONER AHEARNE: Dale, that is 204A?
- 4 MR. SMITH: Yes, 204A, and then there was a
- 5 supplement that came down in July that transmitted some
- 6 of that.

2 coming across clear enough.

- 7 I have a package of the minor editorial
- g comments that we are proposing to make, and I will touch
- 9 on some of these things. For example, we had used
- 10 language relative to the noticing of an opportunity for
- 11 a hearing, and we had perhaps carelessly called that an
- 12 invitation to a hearing. We are proposing that we would
- 13 make those kinds of changes, t get it back into its
- 14 legal terminology.
- 15 COMMISSIONER AHEARNE: Do I understand that
- is you have another package of changes?
- 17 MR. SMITH: We have a package of pen and ink
- 18 changes that, if you wish, we can submit to show you.
- 19 It was one of these things that we judged, for the most
- 20 part, to be of such a minor nature as to not submit it
- 21 until final action, and then we would submit it to the
- 22 Secretary as part of his review of the changes that were
- 23 made.
- 24 COMMISSIONER AHEARNE: These are all, in your
- 25 judgment, non-substantive?

- 1 MR. SMITH: Non-substantive, yes.
- In our earlier discussion, there were two
- 3 things relative to time periods that raised questions.
- 4 One had to do with the amount of time that a host or a
- 5 compact state would be allowed in order to submit its
- 6 request for participation in our rulemaking process.
- 7 After discussion, it became rather apparent that the 15
- 8 days we had proposed in the rule would not be
- g sufficient, and we would propose to raise that time to a
- 10 time of 45 days.
- Also, as we had mentioned earlier, at the time
- 12 that we submitted the rule in its proposed final form,
- 13 we had had some preliminary meetings with the agreement
- 14 states as to the amount of time it would take to get
- 15 this in place, and we had some preliminary discussions
- 16 with industry. We had allowed in the rule a delay of
- 17 120 days for those provisions in Part 20 that affected
- 18 the waste generator.
- 19 The Part 61 requirements affect only the
- 20 disposal operator, and there would be no particular
- 21 reason to felay those requirements. But those things
- 22 that had to do with waste form, waste characteristics,
- 23 and the manifest system are going to take more time to
- 24 prepare for implementation.
- 25 We are, again, suggesting that those

- 1 provisions be delayed for one year, rather than the 120
- 2 days that we had proposed in the paper.
- 3 CHAIRMAN PALLADINO: Does not Part 61 have an
- 4 impact on the waste generators?
- 5 MR. SMITH: Part 61 has an impact on waste
- 6 generators through the waste classification scheme. The
- 7 place in the regulations that these requirements are
- a laid on the waste generator is in Part 20. Part 20 is a
- g regulation that is universally applicable to all waste
- 10 generators. There is a section in Part 20 on waste
- 11 disposal procedures.
- We chose to put the manifest requirement, and
- 13 the requirements that any waste that is prepared for
- 14 delivery to a disposal site must meet the waste
- 15 classification requirements that are spelled out in Part
- 16 61.
- 17 CHAIRMAN PALLADINO: Do you think that these
- 18 classifications A, B, C, are clear enough for both the
- 19 waste generator and the disposal site operator?
- 20 As I recall, the last time, I had trouble
- 21 understanding what A meant, until in the meeting it was
- 22 clarified, and it seemed much more straightforward. Is
- 23 that worth clarifying further in the regulation?
- MR. SMITH: As you notice, Sir, we have
- 25 completely rewritten the section on waste classification

- 1 in an attempt to make it clearer than it was in the
- 2 iraft rule.
- 3 CHAIRMAN PALLADINO: Where is that? Maybe I
- 4 am reading old stuff, then.
- 5 MR. SMITH: If you will turn to Section 61.55,
- 6 which you will find on page 115 in the 204 document. If
- 7 you will turn to page 115.
- 8 COMMISSIONER AHEARNE: Of Enclosure A?
- 9 MR. SMITH: Of Enclosure A.
- 10 If you will notice, for example, on page 114,
- 11 the big table with the line drawn through it was the
- 12 waste classification table as it was presented in the
- 13 proposed rule. It was rather complicated with a large
- 14 number of footnotes.
- In attempting to clarify that, we have created
- 16 the tables that you see a few pages back, on pages 118
- 17 and 119, and have eliminated almost all of the footnotes
- 18 and put them into the text. We have made the text a
- 19 walk-through, step-by-step, set of instructions as best
- 20 we could.
- Now, I can't claim that it is totally
- 22 understandable because there are a number of people who
- 23 say they still have trouble. I won't argue with that
- 24 one. One of the lessons I was taught a long time ago
- 25 is, no matter how much you think you have written it

- 1 properly, if somebody says they don't understand it,
- 2 they don't understand it, and we do something.
- 3 We have attempted to be as responsive to all the comments we have had as was possible. I am always
- 5 open to any further suggestions that the Commission may
- e have on ways to clarify it.
- 7 MR. MARTIN: We do have the guide that is
- 8 being issued simultaneously explaining even further.
- 9 CHAIRMAN PALLADINO: Is that a guide, or a
- 10 branch technical position?
- 11 MR. MARTIN: It is a staff technical position
- 12 that has been out for comment to many of the licensees,
- 13 that amplifies and gives examples as to how all this
- 14 Works.
- 15 CHAIRMAN PALLADINO: From time to time in here
- 16 it refers to branch technical positions, and I was
- 17 wondering, why not make them reg guides?
- 18 MR. MARTIN: Because there really hasn't been
- 19 anybody in research to work on them. That is the simple
- 20 answer. I would like to make them reg guides.
- 21 MR. SMITH: It also is a matter of timing.
- 22 CHAIRMAN PALLADINO: That's good.
- So you do agree in principle that they should
- 24 be reg guides?
- 25 MR. MARTIN: Yes.

- 1 COMMISSIONER AHEARNE: Dale, the slide No. 5
- 2 that you were speaking from, is this an example of --
- 3 Are these slides listing the new substantive changes, or
- 4 is this an example of what you previously said were
- 5 non-substantive changes?
- 6 MR. SMITH: These are more examples of those
- 7 things that we have considered to be substantive enough
- g to bring back to the Commission.
- g COMMISSIONER AHEARNE: So you are bringing
- 10 back every substantive change?
- 11 MR. SMITH: Those that we have judged to be
- 12 substantive, yes.
- 13 COMMISSIONER AHEARNE: Okay.
- 14 MR. SMITH: We have mentioned on slide five
- 15 the need for more time for implementation of some of
- 16 these requirements. I might bring you up to fate on
- 17 where we stand with the three agreement states that have
- 18 operating sites.
- We have meant with the agreement states and
- 20 the potential agreement states that will have disposal
- 21 sites, and have gone over the rule with them, and have
- 22 general agreement on the rule.
- We have met twice with the State of South
- 24 Carolina to develop interim procedures that they would
- 25 implement through their regulatory authority in the way

- 1 of license conditions, and instructions, to be able,
- 2 once Part 61 becomes an effective rule, to be able to
- 3 start some of these systems, like the manifest
- 4 requirement, prior to the time that would be necessary
- 5 for them to promulgate a full set of regulations.
- 6 They have to go through a rather long and
- 7 elaborate procedure themselves. They have the ability
- g to implement certain -- in fact, many of these features
- g are already in place. They have the ability to
- 10 implement provisions through license conditions and the
- 11 like.
- We have met with South Carolina twice now to
- 13 prepare draft license conditions, and prepare to get
- 14 some of these things underway over the next year. We
- 15 have meetings schedules with the States of Nevada and
- 16 Washington.
- Next week, as a matter of fact, we are having
- 18 an all-agreement state conference here, and we will be
- 19 taking advantage of the fact that these representatives
- 20 will be here. We intend to meet with them next week.
- 21 COMMISSIONER AHEARNE: Does Nevaia still
- 22 intend to run a low level si'a?
- 23 MR. SMITH: That is questionable. The thing
- 24 is tied up in all kinds of litigation. We are
- 25 continuing to deal with the state on the basis that they

- have a site. If they choose to close it down, then that
- 2 is one less that we have to deal with.
- 3 CHAIRMAN PALLADINO: Do you have severe
- 4 problems with the states, or do they generally support
- 5 this?
- 6 MR. SMITH: The states are very generally
- 7 supportive of the regulation. They have not expressed
- 8 any serious concerns or identified any serious obstacle
- g to the adoption of it.
- 10 COMMISSIONER AHEARNE: Other than a serious
- 11 concern that they need it out.
- 12 CHAIRMAN PALLADINO: They need it out?
- 13 MR. SMITH: They need it.
- 14 CHAIRMAN PALLADINO: Yes.
- 15 MR. SMITH: We are down to minor procedural
- 16 aspects in terms of things that are yet to be resolved.
- 17 Beyond the three existing sites, we are
- 18 looking toward adoption of a regulations by other
- ig agreement states, and to that end the Conference of
- 20 Radiation Program Control Directors has set up a task
- 21 force to take Part 61, once it is issued, and convert it
- 22 into a model state regulation that uses the right kind
- 23 of language for states, rather than Federal
- 24 regulations.
- The task force is set up and ready to proceed

- 1 on this. This will greatly facilitate adoption by the
- 2 agreement states, since it puts it in adoptable
- 3 language. It also turns out to be a little bit more
- 4 politically acceptable to the agreement states if it
- 5 comes from their own conference of directors.
- 6 COMMISSIONER GILINSKY: Would this, at this
- 7 point, apply to those states that we regulate directly?
- 8 MR. SMITH: Yes.
- 9 COMMISSIONER GILINSKY: Then it is up to the
- 10 agreement states to accept it or not?
- 11 MR. SMITH: It is up to the agreement states
- 12 to become compatible with Part 61.
- 13 CHAIRMAN PALLADINO: Could they become more
- 14 stringent in their requirements? Is there anything that
- 15 would prevent them from becoming more stringent, if some
- 16 of them were interested in that?
- 17 MR. SMITH: As best I have been able to
- 18 determine in talking to state program people and the
- 19 legal people, for those things other than the primary
- 20 radiation standards, it is a possible for a state to
- 21 become more restrictive in the way they do business if
- 22 they choose.
- 23 CHAIRMAN PALLADINO: But on radiation
- 24 requirements they couldn't?
- 25 MR. SMITH: On radiation requirements, the

- 1 equivalent of those things that are in Part 20, they are
- 2 standard that we make.
- 3 COMMISSIONER GILINSKY: Are there any active
- 4 land burial sites to which this would now apply?
- 5 MR. SMITH: Not directly, no.
- 6 CHAIRMAN PALLADINO: You make a statement --
- 7 MR. SMITH: I say not directly, I am sorry.
- 8 We have an active special nuclear material license at
- 9 Barnwell, and we are renegotiating the S&M license at
- 10 Hanford. These rules would apply to those licenses.
- 11 since those licenses represent such a very small
- 12 fraction of what goes on at those sites, we would be
- 13 working through the states, through the implementation
- 14 of requirements on the state material, and we would
- 15 apply it.
- 16 COMMISSIONER GILINSKY: Because that portion
- 17 of waste disposal has not been delegated?
- 18 MR. SMITH: That is right.
- 19 COMMISSIONER GILINSKY: Because it involves
- 20 greater than critical mass?
- 21 MR. SMITH: Greater than critical mass
- 22 possession limits.
- 23 COMMISSIONER GILINSKY: So at this point,
- 24 leaving that aside, the real importance of this is new
- 25 Sites?

- 1 MR. SMITH: New sites, and the basis for
- 2 states to develop their regulations for new sites in
- 3 agreement states.
- 4 CHAIRMAN PALLADINO: You did say that
- 5 applicability of the requirements of Part 61 to
- 6 commission disposal facilities, licenses in effect on
- 7 the effective date of the rule will be determined on a
- g case by case basis. Does that mean that you are going
- g to bring them into compliance?
- 10 MR. SMITH: Yes. The applicability on a case
- 11 by case basis, there are some aspects of the rule that
- 12 you don't backfit, it will be more a matter of forward
- 13 fitting for procedures and things.
- for example, we have looked at the existing
- 15 sites, the state licensed sites, and our participation
- 16 in those sites. We are pretty well agreed that these
- 17 existing sites can meet the performance objectives that
- 18 are laid before us in the rule.
- 19 We have looked at most all of the technical
- 20 requirements that are in the rule, and as we look down
- 21 the list, at those that have to do with site suitability
- 22 in terms of backfitting, essentially those are moot
- 23 issues at this point because the site is there and it is
- 24 in operation.
- 25 We then have to look more toward the things

- 1 like design and operations, and we find that the
- 2 existing sites, both under our license and under the
- 3 state licenses, are complying with most all of the
- 4 design and operation features that are in the rule. The
- 5 one exception is the need to implement the waste
- 8 classification scheme, which from the disposal site
- 7 operator means he has to develop some procedures and
- 8 some designs for segregating class A waste from the
- g others, and for emplacing the class B and C wastes in a
- 10 manner that is prescribed. Other than that, most all of
- 11 the design and operational requirements are met. Things
- 12 like environmental monitoring programs are already in
- 13 place, and they are satisfactory.
- 14 Site closure plans for these existing sites,
- 15 the two licenses that constitute roughly 99 percent of
- the disposal capacity have in place a set of license
- 17 conditions for site closure and stabilization. The
- 18 license conditions were based on our earlier branch
- 19 positions, and actually form the basis for the features
- 20 that are in the rule relative to site closure.
- Nevada, because of their legal difficulties,
- 22 has not reissued a license in some time, but they have
- 23 similar provisions in place through their lease
- 24 arrangements, and others.
- 25 We look at things like the institutional and

- 1 financial aspects, and we find those to be in fairly
- 2 good shape, because the sites are on either state or
- 3 federally owned land, as required by the rule, and
- 4 financial arrangements are in place at these sites.
- 6 facilities have rather elaborate funding arrangements
- 7 for sureties, and for closure costs. Nevada's is not
- g quite as elaborate, but there are funding arrangements
- g in that state as well.
- 10 So in looking at the existing state sites and
- 11 our own sites, we feel that the transition under these
- 12 rules is a very simple one, and it is only in the area
- 13 of operational changes to accommodate the waste
- 14 classification scheme that we see anything really that
- is need to be ione.
- 16 COMMISSIONER GILINSKY: Will this be
- 17 incorporated into the inspection scheme of the various
- 18 regions?
- 19 MR. SMITH: We, through our regional
- 20 inspection, do continue to inspect the special nuclear
- 21 material licenses that we regulate. Through the
- 22 agreement state program, and the program review for
- 23 agreement states, in those states that have waste
- 24 disposal facilities, the review of the waste disposal
- 25 program constitutes a major part of the program review

- 1 for Nevada, Washington, and South Carolina.
- 2 COMMISSIONER GILINSKY: But for the ones that
- 3 we would regulate, I don't know if you can speak to
- 4 this, but is this something that is incorporated into
- 5 the regional inspection package?
- 6 MR. SMITH: Yes.
- 7 MR. MARTIN: The simple answer is yes.
- 8 MR. DENTON: The separation of the waste at
- g the generator, the place of origin, that will be
- 10 incorporated. That is under Part 40 licenses, and will
- 11 now be picked up in our regional inspection program.
- 12 COMMISSIONER GILINSKY: You need some sort of
- 13 QA system to make sure that that is done properly.
- 14 MR. DIRCKS: Yes.
- 15 If you go back when we had the crisis and the
- 16 shutdown of the sites back in 1979-1980, I guess, the
- 17 biggest complaint of the states that had these sites was
- 18 that they were getting poorly packaged waste, unlabeled
- waste, poorly transported waste. They were saying that
- on unless the Federal government did something about it,
- 21 they were going to close these sites down.
- 22 COMMISSIONER GILINSKY: I remember, we had to
- 23 send inspectors.
- MR. DIRCKS: So this will be in the
- 25 regulation.

- 1 COMMISSIONER GILINSKY: How does this get
- 2 incorporated into the regional inspection format?
- MR. DIRCKS: That is being picked up.
- 4 MR. SMITH: It becomes part of the generator's
- 5 license, and Then we will have to work with the regions
- 6 to rewrite the inspection plan to conform more the
- 7 license. Those inspection plans will have to be
- a updated.
- MR. DIRCKS: Yes.
- 10 COMMISSIONER GILINSKY: Is this something that
- 11 is on your schedule?
- 12 MR. MARTIN: It is on our list of things to
- 13 do.
- MR. DIRCKS: In effect, there is another
- 15 mechanism, too, for enforcement action, because there
- 16 are only three -- two point something sites receiving
- 17 Waste, and at the most there won't be a half a dozen in
- 18 the country.
- 19 These receiving sites that all this waste
- 20 funnels through, they have an inspection and reporting
- 21 system that will feel back into our system. So if they
- 22 pick up violations of packaging and transportation, we
- 23 have those arrangements with those states to give us the
- 24 information, so we can take action against the
- 25 generator.

- 1 COMMISSIONER GILINSKY: We prefer to stop it 2 at the source.
- 3 MR. DIRCKS: Yes, but there is another line of
- 4 defense.

  5 CHAIRMAN PALLADINO: Do you want to go on,
- e Dale.
- 7 MR. SMITH: On slide seven, one of the things
- 8 that came up during our discussions the last time that
- 9 needed clarification was the impact of the 300-year
- 10 institutional control period that the Department of
- 11 Energy had suggested. We attempted to clarify this in a
- 12 memo that we sent to you back in August.
- 13 Basically, our conclusion was that for the
- 14 commercial waste generation, the kind of waste that is
- 15 generated in the commercial sector, and the fact that
- 16 the burden for institutional control falls largely on
- 17 the state, our initial position was still the correct
- 18 position that the 300-year institutional control period
- 19 that DOE proposed does allow more waste to be called
- 20 class A than would be the case under our rule. It does
- 21 not affect the upper-limits for what can be disposed of
- 22 by shallow land burial, only the split between the A and
- 23 the B categories.
- The 100-year institutional period was chosen
- 25 by us largely on the basis of public consensus that was

- 1 obtained through our series of workshops that involved
- 2 states, industry people, people concerned with public
- 3 interest groups. The question was not how long do you
- 4 expect society to last, or how long can you expect
- 5 governments to last, but how long should you expect them
- 8 to be pay attention and do something about waste. There
- 7 was a general consensus that 100 years was probably as
- 8 long you would want to burden a state, or any other
- g governmental unit, with this kind of obligation.
- 10 In looking at the general situation, the
- 11 amount of additional waste that could be disposed of as
- 12 class A waste, if we were to go to a 300-year period,
- 13 would turn out to be a relatively small percentage, and
- 14 in reality would have very little effect because of
- 15 existing restrictions at disposal sites it would still
- 16 have to go in as solidified waste under the present
- 17 schedule.
- In our discussion with Commissioner Ahearne,
- 19 after the main session, there were some questions raised
- 20 as to some of the data that was presented in the
- 21 environmental impact statement, the 204A paper. In our
- 22 August 20th memo, we sent down some pen and ink changes
- 23 that we hope clarified the questions that were raised
- 24 there.
- 25 Another question that came up in the

- 1 discussions had to do with the ability of the Federal
- 2 government, particularly the Department of Interior and
- 3 the Bureau of Land Management, to own and maintain
- 4 custody of a closed site. In our memo to you of August
- 5 20th, we present two points.
- 6 Actually, it is our legal view that even
- 7 though there appears to be some conflict within their
- 8 regulations and their statutes, it is possible for them
- g to do this. However, discussions with Department of
- 10 Interior staff indicate that they are not very anxious
- 11 to do this.
- The result of all of this is that we will not
- 13 be issuing a license without some clear commitment on
- 14 the part of the landowner that they, indeed, are willing
- 15 to take on this responsibility. If the Department of
- 16 Interior, with their lands, at that time are not willing
- 17 to take it on, that eliminates that as a potential
- 18 site.
- 19 What it tends to do, it seems to me, is to
- on drive the selection of sites more toward state-owned
- 21 than federally-owned land, or maybe federal-land that
- 22 end up being transferred to the state ownership, but not
- 23 federally-owned sites for long-term custody.
- 24 COMMISSIONER ASSELSTINE: Dale, is that
- 25 something that the states understand? Do they

- 1 understand that the practical effect of this rule is
- 2 going to be, for all intents and purposes, the states
- 3 are the ones that are going to have to provide the land
- 4 for these disposal sites in the future?
- 5 MR. SMITH: I think they do. It is not
- 8 something that I have discussed, but as I see what the
- 7 states are doing and the way that they are approaching,
- g it is very clear that they are taking this Low Level
- g Waste Policy Act seriously and are taking on the
- 10 responsibility for the compacts for the development of
- 11 the sites.
- 12 I am not aware of any trend towards trying to
- 13 build these things strictly on federal lands. In fact,
- 14 in Colorado, which is one of the first indications we
- 15 have seen of new site development, a certain portion of
- the land on their proposed site is federal land, and
- 17 they are working with the Bureau of Land Management to
- 18 have that land transferred from the Federal government
- 19 to the state for ownership.
- 20 COMMISSIONER ASSELSTINE: It might be useful,
- 21 When you have those meetings that are coming up, to make
- 22 sure that the people do understand that, so that it
- 23 doesn't come as a surprise.
- MR. SMITH: Yes.
- 25 COMMISSIONER AHEARNE: The reason I had raised

- 1 the issue, to which they responded, was the way the rule
- 2 was, they had to have a permanent agreement with the
- 3 permanent owner, and I was just curious as to whether or
- 4 not the Federal government was prepared and could do
- 5 that.
- 6 MR. SMITH: Some of the guestions that were
- 7 raised had to do with legal views on whether or not
- 8 waste that exceeded the class C limits in Part 61
- g automatically became high level waste. The answer to
- 10 that question is, no, they don't.
- 11 High level waste is a legally defined term
- 12 that is based on the source of the waste and not on its
- 13 radiological properties. The class A, B, C
- 14 classifications are largely based on radiological
- 15 properties, and thus it is possible to have a waste that
- 16 exceeds the class C limits, but did not originate from
- 17 that source that has been legally defined as a source of
- 18 high level waste. Therefore, it is not high level
- 19 waste, but simply a low level waste that exceeds the
- 20 class C limits.
- 21 CHAIRMAN PALLADINO: Where does that go?
- 22 MR SMITH: We have provided at this time in
- 23 Part 61 for consideration of these kind of waste
- 24 disposals on a case by case basis. We have had very few
- 25 of these in the past, and they do constitute at this

- 1 time a fairly small percentage of the total.
- We would look at them on a specific basis,
- 3 taking into account where it would be disposed, the
- 4 method that they would propose, and we would apply the
- 5 performance objectives of Part 61 to see that they were
- e met.
- 7 COMMISSIONER AHEARNE: Would that assentially
- 8 be, perhaps, waste from a reactor accident?
- 9 MR. SMITH: The closest that we have come to
- 10 that so far are some of the high activity resins that
- 11 have gone to Hanford from Three Mile Island.
- 12 Special provisions were made there in that
- 13 below the normal lepth of the trench, they excavated
- 14 further compartments for placement of this high activity
- 15 waste, backfilled it, and then piled waste that had been
- 16 solidified with cement on top of that deeply buried
- 17 waste to provide a further barrier. And being a dry,
- 18 arrid site, where the migration problems are
- 19 non-existent, we judged that, along with the State of
- 20 Washington, to be a suitable way of disposing of that
- 21 particular kind of waste.
- (Commissioner Gilinsky left the meeting.)
- 23 COMMISSIONER AHEARNE: I found interesting, in
- 24 part of the response that you sent up on July 23rd,
- 25 obviously it is an accurate statement, that low level

- 1 waste is waste containing source byproduct and special
- 2 nuclear material not specifically defined as some other
- 3 kind of waste.
- 4 CHAIRMAN PALLADINO: But sometimes you can't
- 5 do better than that.
- 6 COMMISSIONER AHEARNE: Right, but it
- 7 guarantees then that you have everything covered.
- 8 MR. DIRCKS: Not otherwise identified by name
- g is low level waste.
- MR. SMITH: A couple of questions we responded
- 11 to relative to the legal authority for financial
- 12 assurances. The bottom line there is, for those periods
- 13 of time where we have active licensing responsibility,
- 14 we have the authority to require the financial.
- 15 assurities, and this would take it through the
- 16 operation, the closure, and the post-closure period.
- 17 Beyond that, when the responsibility for the
- 18 site transfers to the custodian, our authority begins to
- 19 erode. The approach that we have taken in the rule is
- 20 to require evidence up-front that some arrangements had
- 21 been made between the site operator and the eventualy
- 22 custodian for financial support for this institutional
- 23 control period. That is the extent of that.
- 24 COMMISSIONER AHEARNE: Basically, as you
- 25 pointed out earlier, that essentially is the state.

- 1 MR. SMITH: Yes, it is the state.
- 2 COMMISSIONER AHEARNE: So as you point out in
- 3 your response, such an arrangement must be effected by
- 4 the state and be reviewed and approved by the NRC before
- 5 a license is issued.
- 6 MR. SMITH: The final point in that response
- 7 had to do with Indian tribes as related to the
- a provisions of our regulations. By a long process of
- 9 elimination, the lawyers have concluded that they fall
- 10 into the "other entity" category.
- 11 COMMISSIONER AHEARNE: My question was, I
- 12 wanted to be sure that the Indian tribes were included
- 13 in the provisions of the regulation, and it wasn't
- 14 obvious to me that they were, and could therefore have
- 15 the right to the state. The lawyers have constructed
- 16 this argument.
- 17 COMMISSIONER ROBERTS: Do you concur with the
- 18 thrust of the argument?
- 19 COMMISSIONER AHEARNE: Yes. More
- 20 particularly, we now have a memo from the legal side of
- 21 the NRC saying, yes, they are in there, and here is
- 22 how. At one of those state planning council meetings I
- 23 sat through, I got sensitized to the need of the Indian
- 24 tribes.
- 25 MR. SMITH: We received a piece of

- 1 correspondence from Sol Harris, who is a committee
- 2 chairman of the Health Physics Society, in which he
- 3 expressed several concerns. We talked with Mr. Harris
- 4 and found that his primary concern is with the need for
- 5 a de minimis category, those kinds of wastes that are of
- 6 such low consequences to not merit regulatory control.
- 7 We have taken the position in the rule, and we
- a reiterated this to Mr. Harris, that we are committed to
- g dealing with these problems on a waste stream by waste
- 10 stream basis, that we are not prepared to incorporate
- 11 the in Part 61 at this time, and we did not want to hold
- 12 the rule up as a result.
- But we are committed to examining those waste
- 14 streams that are brought to our attention, and that we
- is ferret out, too, from our own knowledge, thirds that
- 16 could be disposed of by less restrictive methods, and
- 17 including methods that are not under NRC regulatory
- 18 control.
- An example of one that we have already done
- 20 this with is the liquid assimilation waste, where the
- 21 radioactivity content of the waste was so low as to be
- 22 no problem. We have essentially deregulated it, and it
- 23 has become more of a question of how do you dispose of
- 24 xylene and taluens, and other organic chemicals.
- 25 COMMISSIONER AHEARNE: What, then, is the NMSS

- 1 position with respect to the question of a de minimis
- 2 level?
- 3 MR. MARTIN: The position on that is that we
- 4 should not approach it generically, but we should
- 5 identify target waste streams, work through a dozen or
- 6 so of these things and see if a pattern emerges.
- 7 COMMISSIONER AHEARNE: What you are saying is
- g that you do agree with the concept of getting to a de
- g minimis level.
- 10 MR. MARTIN: Yes.
- 11 COMMISSIONER AHEARNE: But that your approach
- 12 is to do it by --
- 13 MR. MARTIN: On a case by case basis for a
- 14 while.
- 15 COMMISSIONER AHEARNE: Case by case being
- 16 waste stream by waste stream?
- 17 MR. SMITH:
- 18 MR. MARTIN: Yes. We went over that with
- 19 Harris in some detail and confirmed it in a letter. I
- 20 think it is safe to say that he is satisfied.
- MR. SMITH: Yes.
- 22 COMMISSIONER AHEARNE: That also, then,
- 23 somewhat addresses some of the concerns that Matusick
- 24 raised?
- MR. MARTIN: Yes.

- 1 CHAIRMAN PALLADINO: After you develop some
- 2 experience with these various streams, you may develop a
- 3 de minimis rule?
- 4 MR. SMITH: Yes.
- 5 MR. MARTIN: There was a Federal Radiation
- 6 Policy Council that was in effect a couple of years
- 7 ago. They looked at the same question, and also
- 8 concluded that if we tried to now proceed on a generic
- g front, we would probably wind up with limits that are so
- 10 conservative that they don't help anybody. So we should
- 11 look at it individually and then see where we are in a
- 12 year or so.
- 13 That has built into a substantial portion of
- 14 the Low Level Waste Branch's efforts. For the next
- 15 couple of years, we are going to be doing just that.
- 16 COMMISSIONER ASSELSTINE: Does that mean that
- 17 someone has to come in for an exemption from the rule?
- 18 MR. MARTIN: They can propose an exemption, or
- 19 hopefully we are going to identify some targets
- 20 ourselves and work through. It could be either way.
- 21 COMMISSIONER ASSELSTINE: For example, how
- 22 about the assimilation waste, where you have already
- 23 made that determination.
- MR. MARTIN: We did that on our own
- 25 initiative.

- 1 COMMISSIONER ASSELSTINE: So no other action 2 is required.
- 3 MR. MARTIN: No.
- 4 COMMISSIONER ASSELSTINE: As far as that is 5 concerned, this rule loesn't change the requirement.
- 6 MR. MARTIN: No.

14 this done.

- MR. SMITH: In talking with Mr. Harris, who
  a happens to be the chairman of the De Minimis Committee
  within the Health Physics Society, we encouraged him and
  to others to identify to us those things that they wanted
  us to address. We also clarified with him that it is
  that it is not necessary for each and every licensee to
  come in with a petition for rulemaking in order to get
- The next three issues have to do with waste

  treatment, waste form, and I would ask that Bob Brownlee

  rome up and address those.
- MR. BROWNLEE: The first issue on page 12 has
  19 to do with a concern expressed to us by an industry
  20 group called Utility Nuclear Waste Management Group,
  21 with regard to how we intended to implement the waste
  22 classification part of the rule.
- They were concerned that it could be
  interpreted to require detailed analyses of every
  individual package that went out of the plant. We have

- 1 tried to make it clear through our meetings with them,
- 2 and our branch technical position which will go out
- 3 parallel with the rule, that that is not the case, that
- 4 there are other alternative ways of doing it.
- 5 We have had one meeting with them. We have
- 8 actually visited the Yankee, as we have indicated here
- 7 in the response. In the case of the Yankee plant, they
- 8 have in place a system for analyzing their waste and
- g knowledge of what their waste streams are that looks
- 10 like they will be able to comply without any additional
- 11 changes at all.
- 12 We have lined up visits to other plants. For
- 13 example, the Duke people have asked us to come down and
- 14 work with them to make sure that there is a viable,
- 15 practical system for providing the degree of assurance
- 16 required that we know what is in the waste streams.
- 17 COMMISSIONER AHEARNE: But it is true, is it
- is not, that any waste package must be labeled as to what
- 19 the waste is?
- 20 MR. BROWNLEE: That is right.
- 21 COMMISSIONER AHEARNE: It is also true, isn't
- 22 it, that the waste package as a whole must fit within
- 23 the category that it is so labeled.
- MR. BROWNLEE: Yes.
- 25 MR. MARTIN: I think the main concern here

- 1 was, do we have to put every package through a
- 2 spectrometer or something. We have taken the position,
- 3 no, there are a lot of ways of dealing with this. You
- 4 can do that if you want to, but more likely you would
- 5 qualify the waste stream, and as long as you didn't
- 6 change anything, you don't have to measure every single
- 7 package. There are a number of ways like that that are
- g now working out with the waste generators, and it seems
- g to be going smoothly.
- 10 MR. BROWNLEE: I would expect that by the time
- 11 the rule becomes effective at the waste generator part
- 12 of the thing that we would have walked through enough
- 13 examples and included them in our branch technical
- 14 position that the concern that we will impose some
- 15 system on them that is just not implementable would go
- 18 away .
- 17 The next issue is the question that was raised
- 18 from the Dow Chemical Company and Mr. Bill Bader of CRB
- 19 Associates with regard to the limit that we have in the
- 20 standard of 1 percent free liquids in dewatered wastes,
- 21 their primary concern being the resins that come from
- 22 reactor plants as a waste stream.
- 23 Their point is that technologies exist that
- 24 would give assurance that the amount of free liquid in
- 25 the waste that is offered for disposal is significantly

- 1 less than 1 percent. However, our analyses and our
- 2 reviews indicate that the basis for imposing a tighter
- 3 limit, even though it is technically feasible, just
- 4 isn't there when you consider the cost impacts, the
- 5 impacts on the disposal, and the impact on the
- 6 transportation. We have proposed to leave the limit at
- 7 the particular point where it is.
- It is interesting to note that the analysis
- g that we have done, or that the Department of Energy has
- 10 actually done on the Three Mile Island wastes, which are
- 11 at the upper limit of these kinds of wastes, where they
- 12 have actually taken two of the liners to
- 13 Battelle-Columbus Laboratory, and analyzed the contents
- 14 in detail, confirms the conclusion that the amount of
- 15 liquid is actually low, it is not high, if you use good
- 16 dewatering practices, and the radioactive content of
- 17 that liquid is very low. It shouldn't be surprising
- 18 because that is why we use the resin, to clean up the
- 19 Water, to take the radionuclides out of the water and
- 20 put them on the resins.
- 21 The data coming out of the DOE experiments say
- 22 that this remains the case with longer periods of time.
- 23 So during the period that the liners, with the small
- 24 amount of liquid, would be either in storage or in the
- 25 transportation mode, the radioactive content of that

- 1 liquid would be very small.
- 2 COmmissioner AHEARNE: What percentage of free
- 3 water was in the Battelle examinations?
- 4 MR. BROWNLEE: I don't remember the exact
- 5 number. It was less than 0.5 percent.
- I think that it should also be noted that our
- 7 plan in implementing this rule would be along the lines
- 8 of ALARA in that waste generators that have these waste
- g streams would demonstrate the capability to dewater the
- 10 resins to levels probably lower than the 1 percent, or
- 11 at least as low as they can.
- 12 The industry that presents that service to the
- 3 utilities, in designing their containers, are designing
- 14 them with lewstering capability. Then they run a
- 15 qualification program, in effect, where they take a
- 13 liner, treat it as if it were radioactive, pump the
- 17 Water out, let it sit, pump some more water out, let it
- 18 sit, and devise a plan of pumping and waiting that would
- 19 give the dagree of assurance that the amount of liquid
- 20 is significantly below the 1 percent.
- 21 COMMISSIONER AHEARNE: Let me ask you two
- 22 questions, Bob.
- 23 Correct me if I am wrong, but my memory was
- 24 that at one point in recent past years, it was NMSS's
- 25 position that they should try to do away with

- 1 free-standing water in the waste.
- 2 MR. BROWNLEE: It still is our position. We
- 3 would like to minimize the amount of free-standing
- 4 liquid that is in the container. The limits that are
- 5 imposed are based on what the reasonable
- a state-of-the-art is today.
- 7 COMMISSIONER AHEARNE: This gets to the second
- a question.
- g You mention here on this slide, and as you
- 10 just mentioned, this represents what is reasonably
- 11 achievable using current technology. Is it a misreading
- 12 of the Dow argument that they are saying that beyond
- 13 that is current technology. If that is not a
- 14 misreading, then are they incorrect?
- What they propose would lead the reader to
- 16 believe that it is possible with current technology to
- 17 do much better.
- 18 MR. BROWNLEE: The technology that they are
- 19 referring to is a solidification technology. In other
- 20 words, if we were to lower the limits today, the
- 21 practical reality of that would be, everyone would have
- 22 to solidify their resins in order to meet the limit.
- 23 COMMISSIONER AHEARNE: Right.
- MR. BROWNLEE: We have analyzed it and said
- 25 that, from a disposal standpoint, we can't justify the

- 1 extra cost.
- 2 MR. MARTIN: Let me answer the question.
- I think the answer is, yes, that if you wanted
- 4 to get --
- 5 COMMISSIONER AHEARNE: The answer to which
- a question?
- 7 MR. MARTIN: Is it technologically feasible to
- g get to lower quantities of water. The answer is, yes.
- g Using the Dow process is one way to do it, and there is
- 10 a number of other ways.
- on the other hand, in checking what it would
- 12 cost to do this, we are talking about, on the average,
- 13 the utility spending \$10 to \$20 million to go from a
- 14 small amount of liquid in a container to an even smaller
- 15 amount.
- 16 You are correct that originally, when we
- 17 started off looking at this question, our natural bias
- 18 was, let's get it as low as we can. But then when
- ig examined the problem, what is the problem with the
- 20 free-standing water; is it a public health and safety
- 21 issue, or what is the issue here, and we dissected that
- 22 problem, it primarily turns out to be a nuisance item
- 23 that during shipment sometimes you have leaks that are
- 24 not a public health, but they are an irritant.
- 25 CHAIRMAN PALLADINO: To whom are they an

- 1 irritant?
- 2 MR. MARIIN: They are an irritant to the
- 3 shipper. They are an irritant to the state that runs
- 4 the burial ground. They raised a big issue about
- 5 getting leaking shipments.
- 6 MR. DIRCKS: Public perception, too, I think.
- 7 MR. MARTIN: There is a perception problem.
- 8 So after we looked at these enormous costs, frankly we
- g did not realize that we were talking about that amount
- 10 of money, and we talked to the utilities about, "If you
- 11 do a good job dewatering these, and really work at it,
- 12 what can you to?" It looks like it is reproducible to
- 13 get 1 percent, and we can't make a case that there is
- 14 any major incentive to go much below that.
- 15 CHAIRMAN PALLADINO: Bob said that they were
- 16 going to try to get people to go as low as they.
- 17 MR. BROWNLEE: Or demonstrate that they can.
- 18 MR. MARTIN: Show that it can be done without
- 19 spending a lot more money.
- 20 CHAIRMAN PALLADINO: It wasn't all that
- 21 clear.
- 22 MR. BROWNLEE: For example, it is not really
- 23 in the utility's interest to stop dewatering when it is
- 24 just at the 1 percent level because the olds are that
- 25 more would be generated during the transportation mode.

- 1 COMMISSIONER AHEARNE: I understand. What I
- 2 was focusing on is that the slide says, "The revised 10
- 3 CFR 61 free liquid limits represents what is reasonably
- 4 achievable using current technology." I think that you
- 5 just said, Jack --
- 6 MR. MARTIN: That is not strictly accurate.
- 7 It is using present methods.
- 8 COMMISSIONER AHEARNE: There would be an
- g economic factor put in because, I think, as you have
- 10 said, in the certification, you can actually go to much
- 11 lower limits.
- 12 MR. MARTIN: Right.
- 13 MR. DIRCKS: It is the old debate of using the
- 14 best available technology versus the best practical
- 15 technology.
- 16 COMMISSIONER AHEARNE: I was just trying to
- 17 clarify.
- 18 MR. MARTIN: You are correct.
- 19 COMMISSIONER AHEARNE: So that our limit is
- 20 based on cost/benefit analysis?
- 21 MR. MARTIN: It puts us in the position --
- 22 frequently I get accused of being on the other side of
- 23 the question. We are in a position of, okay, you have
- 24 technologies available and it costs a lot of money, but
- 25 is it really necessary? We have concluded, no, it is

- 1 not necessary.
- 2 COMMISSIONER AHEARNE: My concern was, if our
- 3 regulations described as "this is the best that can be
- 4 done with the technology," I don't think that it is an
- 5 accurate description.
- 8 MR. MARTIN: No, it is not.
- 7 MR. BROWNLEE: There is technology available
- 8 that would get it below the 1 percent with a high level
- 9 of assurance.
- 10 CHAIRMAN PALLADING: In pointing out the
- 11 economics, you still have to rely on the fact that this
- 12 doesn't impose a health and safety problem, therefore,
- 13 economics can apply.
- 14 MR. MARTIN: That is right.
- 15 CHAIRMAN PALLADINO: Congressman Albosta wrote
- 16 to us and also raised questions on this point. He says,
- 17 if we don't reduce it, he would like to know the reason
- is for it. I gather, also, he is looking at it from the
- 19 perspective of transportation, if I understand, he is on
- one of the transportation committees.
- 21 COMMISSIONER AHEARNE: As Jack has pointed
- 22 out, over the past several years, or Bill pointed out,
- 23 the difficulties that have arisen with respect to low
- 24 level wastes have primarily been due to water leaking
- 25 out of packages and being identified, either during

- 1 transit or when it gets to the low level waste site.
- 2 MR. BROWNLEE: I think that one of the worst
- 3 incidents, if you can characterize the worst, in the
- 4 case of an actual leakage during transportation, was in
- 5 fact related to an improperly solidified package using
- 6 the urea formeldehyde solidification technique which
- 7 results in highly acidic liquids if it is not done
- a properly. The acid actually ate through the carbon
- g steel liner and leaked during shipment.
- 10 COMMISSIONER ROBERTS: When was that?
- 11 MR. BROWNLEE: That was in 1979, it was about
- 12 the time when the states started getting excited about
- 13 the improperly packaged waste going to the sites. It is
- 14 not a recent incident. As a matter of fact, although
- 15 they have tried to continue to improve the process, all
- 16 the burial sites have now banned that solidification
- 17 technique, so it is not being used any more.
- 18 CHAIRMAN PALLADINO: One of my staff members
- 19 got a call the other day from a staff member of
- 20 Congressman Albosta voicing concern about the proposed
- 21 10 CFR 61. It says, "Their interest was initially
- 22 sparked by Dow Chemical, but they appear more concerned
- 23 with safety problems in the transport of nuclear waste,
- 24 rather than disposal areas. The more recent question
- 25 posed concerned whether or not we have any test data

- 1 available on the capability of high integrity containers
- 2 to withstand fires or drops."
- 3 As separate issue from that, what is the
- 4 relationship between 10 CFR Part 61 and DOT
- 5 regulations. Is there a connection?
- 6 MR. MARTIN: Dick Cunningham, would you mind?
- 7 He is our transportation expert.
- 8 CHAIRMAN PALLADINO: I would like to get him
- g over here. I would like his response to get this
- 10 question answered.
- 11 MR. MARTIN: I might say, on that letter, when
- 12 we prepared the response, we prepared it pretty general,
- 13 since we didn't know what the Commission's position
- 14 was. We could go through it point by point.
- 15 CHAIRMAN PALLADINO: He is raising questions
- 16 that really relate to transportation, and the
- 17 interrelation between the two would be of interest.
- 18 MR. CUNNINGHAM: The first point is that the
- 19 term "high integrity" pertains to waste disposal. It is
- on not a term used in the transport system.
- 21 Basically, the transport system has two types
- 22 of containers, the type A container, and the type B
- 23 container. The A container having the smaller amounts
- 24 of radioactive materials. DOT regulates type A
- 25 containers. They specify the design criteria in its

- 1 regulations.
- 2 Basically that container has to withstand the
- 3 normal conditions of transport, that is, it has to be
- 4 able to withstand frops from a forklift, the vibration,
- s and so forth.
- 6 CHAIRMAN PALLADINO: This is type A?
- 7 MR. CUNNINGHAM: Type A. Type B containers
- 8 are the ones which we at NRC certify. Those containers
- g must withstand accident conditions. The Type B
- 10 container varies depending on what is put into it, but
- 11 the type B container is one that could store high level
- 12 waste also.
- 13 COMMISSIONER AHEARNE: Or spent fuel.
- MR. CUNNINGHAM: Spent fuel, high level waste,
- 15 and some of the materials that came out of TMI.
- 16 COMMISSIONER AHEARNE: Is it correct that the
- 17 only categories that are in the low level waste rule
- 18 that would require type B, would be possibly some of the
- 19 C wastes.
- 20 MR. MARTIN: Yes.
- 21 MR. CUNNINGHAM: Yes, and there might be under
- 22 that special provision in the rule where you examine
- 23 things on a case by case basis. You might have type B
- 24 containers. Hospital sources, for example, might
- 25 require type B containers.

- MR. MARTIN: For example, a control rod would probably be a B waste, but would still require pretty careful shipment. So it could be B or C, the higher attegory.
- 6 integrity container is that we at NRC have not been
- 7 asked to examine it in terms of certification as a type
- 8 B container. Typically, the container, as I understand
- g this high integrity container, it is the inner-most
- 10 container that would actually contain the waste
- 11 material. These would probably be shipped as liners to
- 12 an overpack that would withstand the accident and
- 13 provide protection against accidents in transportation.
- 14 Most type B containers are sufficiently
- 15 expensive that you don't throw the whole container
- 16 away. You have an inner-liner that contains the waste
- 17 and then you remove that at the burial ground.
- 18 MR. MARTIN: I think that is the answer, the
- 19 high integrity container has high integrity, or what we
- 20 mean by high integrity, after it is in the burial
- 21 ground. But for purposes of shipment, you rely on the
- 22 type B container that you have put this thing inside of
- 23 it, and don't rely on it for anything during shipment.
- 24 CHAIRMAN PALLADINO: As long as we are on
- 25 transportation, just one more question.

- 1 Can type A go in cardboard boxes? I am sorry,
- 2 can type A wastes, can they go in cariboard boxes to the
- 3 burial?
- 4 MR. CUNNINGHAM: Yes, they can. They can be
- 5 transported in that provided that it meets the design
- 6 criteria for DOT, and this consists of certain vibration
- 7 tests and four-foot drop tests, and so forth.
- 8 CHAIRMAN PALLADINO: They have to meet that?
- g MR. CUNNINGHAM: They have to withstand that
- 10 kind of tests.
- 11 CHAIRMAN PALLADINO: I gather that some of the
- 12 problems that there have been with shipments, they have
- 13 been with those in fiberboard or cardboard.
- 14 MR. MARTIN: I point out, Mr. Chairman, that
- 15 the tranport regulation would permit it, but one of the
- 16 features in Part 61 is that you shouldn't use cardboard
- 17 boxes anymore because of all the hassle that we have had
- 18 over crushed and broken containers.
- 19 CHAIRMAN PALLADINO: That is why I asked the
- 20 question, because of my recollection.
- 21 MR. MARTIN: It is not a transport
- 22 requirement.
- 23 CHAIRMAN PALLADINO: You are discouraging it?
- 24 MR. MARTIN: Yes.
- 25 COMMISSIONER ROBERTS: What does a type B

- 1 shipping container cost?
- 2 MR. CUNNINGHAM: It varies considerably
- 3 depending on what it is intended to contain. An
- 4 irradiated fuel container would cost millions of
- 5 dollars. Smaller containers, I suppose you could design
- 6 some for tens of thousands of follars. They tend to be
- 7 expensive, and part of the expense is a result of the
- a design and analysis to show that it can withstand
- a accidents.
- 10 MR. BROWNLEE: Just to try to put that into
- 11 perspective, the reactor plant resins that are presently
- 12 being shipped as dewatered resins, or previously were
- 13 being shipped as lewatered resins, would typically be
- 14 shipped in the carbon steel liner on the order of 0.25
- 15 inches thick.
- 16 COMMISSIONER AHEARNE: But that is not a B.
- 17 MR. CUNNINGHAM: That would not meet the
- 18 requirements of a type B shipping container, or a B or C
- 19 category waste at the disposal site, in that it wouldn't
- 20 provide stability.
- 21 The integrity containers that are presently
- 22 coming on the market are replacing that carbon steel
- 23 liner with a high density polyethylene liner on the
- 24 basis that the tests that have been run to date indicate
- 25 that that would provide the long-term stability, a

- 1 long-term integrity much longer than the carbon steel
- 2 irum would.
- 3 COMMISSIONER AHEARNE: But that would still
- 4 not be a type B.
- 5 MR. CUNNINGHAM: It would still not be a type
- 8 B shipping container, unless it were designed to be, and
- 7 they are typically not designing them to be. They are
- g designing them to be something that is disposable, but
- g yet still provide the stability at the disposal site.
- 10 That sort of leads into page 14, which was the
- 11 other Dow Chemical Company and Mr. Baier raised with
- 12 regard to the high integrity container, their point
- 13 being that they didn't think that the data that was
- 14 available provided assurance that the high integrity
- 15 container was a proven alternative to certification.
- The dilemma there, as our regulation isn't in
- 17 effect, is that no one has submitted a high integrity
- 18 container to meet our criteria. But the State of South
- 19 Carolina has received three applications for high
- 20 integrity containers under their state license
- 21 condition, which they have approved on what I would
- 22 refer to as sort of a tentative kind of approval to
- 23 start getting a body of experience on dealing with the
- 24 relatively method.
- 25 Those liners are high density polyethylene.

- 1 They are manufactured by Chem-Nuclear, Hitman, and the
- 2 Philadelphia Electric Company has gotten an approved
- 3 design for their waste container. The primary incentive
- 4 is to allow the use of high density polyethylene.
- 5 Although no one has formally submitted the
- 8 information to us, based on the information that we have
- 7 seen, it looks like South Carolina has taken a step in
- g the right direction to allow the use of these liners.
- g But line any new technology, you would like to get some
- 10 experience under your belt in dealing with it, to make
- 11 sure that there aren't any hidden flows that the test
- 12 data that exists to date has not revealed.
- 13 The basis for allowing it in the regulation is
- 14 not that we had had in mind a particular high integrity
- 15 container. We are not endorsing the high density
- 16 polyethylane container as meeting our requirements. We
- 17 wanted to allow the concept of an alternative way to
- 18 providing stability at the burial site as an alternative
- 19 to solidification.
- 20 Really, this was a new concept which we hadn't
- 21 had in mind when we were dealing with the first stages
- 22 of the Three Mile Island resin wastes. It certainly
- 23 seems like a reasonable concept that allows the waste
- 24 generators some flexibility on how they go about meeting
- 25 the performance objectives that is important at the

- 1 disposal site.
- 2 As the slide indicates, the regulation allows
- 3 that flexibility by allowing either the waste form, if
- 4 someone elected to solidify it and put in solid
- 5 monolyth, that would be one acceptable way. In other
- 6 words, the Dow process is a perfectly acceptable
- 7 process, apparently, for providing that stability.
- 8 Another way would be to provide the stability via the
- 9 waste container itself. The third would be to provide
- 10 it at the disposal site via some disposal facility
- 11 structure.
- 12 The net result is, we have concluded that we
- 13 did not want to change the rule to eliminate the
- 14 flexibility that would be allowed by the different
- 15 concepts.
- 16 MR. MARTIN: I think that brings us to the end
- 17 of an up-to-date, I would hope.
- 18 CHAIRMAN PALLADINO: Okay.
- 19 MR. MARTIN: If you have questions.
- 20 CHAIRMAN PALLADINO: I have a few questions.
- 21 I will start with them, and then turn the questioning
- 22 over to others.
- 23 One page 11 of Enclosure A of 204 -- my
- 24 questions are all going to be related to 204 -- we again
- 25 face the question of EPA standards. We have had

- 1 problems proceeding without EPA standard.
- MR. SMITH: Yes.
- 3 CHAIRMAN PALLADINO: It is not clear to me
- 4 when there is a requirement imposed on us that we must
- 5 have EPA standards and when there is not. The
- 6 implication I get here is that the EPA standards don't
- 7 exist, but the range that you cover would not require a
- a change in the Part 61.
- 9 MR. SMITH: What we did there, Mr. Chairman,
- 10 we went to EPA and we said, "Look, here is what we are
- 11 doing. Is there anything in here that you would find
- 12 objectionable; or is there anything in here that you
- 13 would see any future activities that you might undertake
- 14 being in conflict?" They came back and they said, no.
- 15 There is no law requiring EPA to prepare a low
- 16 level waste standard.
- 17 CHAIRMAN PALLADINO: That is what I meant.
- 18 MR. SMITH: It is not the same as the
- 19 mill-tailings.
- 20 CHAIRMAN PALLADINO: That explains the
- 21 difference in our posture between the high level waste
- 22 and the --
- MR. SMITH: Yes.
- 24 Off and on, we have done some internal
- 25 planning about getting cranked up and doing something in

- 1 the low level waste area, and we have been discouraging
- 2 them from that mainly because there are a lot of states,
- 3 time is short, we need more burial capacity, and what we
- 4 don't need to do is provide another reason not to
- 5 proceed.
- 6 COMMISSIONER AHEARNE: I can think of another
- 7 receiving for convincing them not to and that is they
- g have --
- 9 MR. SMITH: It may never happen.
- 10 COMMISSIONER AHEARNE: No. They haven't
- 11 managed to do the things they are supposed to do.
- 12 CHAIRMAN PALLADINO: My question really was.
- 13 is there any law that says they have got to come out
- 14 with a schedule, and how does it affect our posture on
- 15 low level waste.
- 16 MR. SMITH: That is notably missing from any
- 17 legislation.
- 18 MR. DIRCKS: But they do have the authority,
- 19 and if they did come out with standards that differed
- 20 from our rule, we would be in trouble.
- 21 MR. SMITH: That is right.
- MR. MARTIN: I think the real question is, how
- 23 does the NRC proceed in the absence of an EPA standard,
- 24 and does the NRC do something that looks like it is
- 25 infringing on the EPA's authority.

- 1 CHAIRMAN PALLADINO: Right now it doesn't
- 2 appear to be infringing on a requirement of theirs to
- 3 come out with a standard. I don't know that we are
- 4 infringing their authority, because if they come out
- 5 with one, we will have to comply.
- 6 MR. SMITH: Yes.
- 7 CHAIRMAN PALLADINO: Incidentally, on the top
- 8 of page 12, it that EPA had expressed this opinion that
- g it was inappropriate to apply the EPA drinking water
- 10 standard that is proposed in 51.41. Why was that?
- 11 MR. MARTIN: That is because the EPA drinking
- 12 water standard is strictly written -- strictly speaking,
- 13 it is written to apply to people who run drinking water
- 14 facilities.
- 15 If you were in the irinking water business, or
- 16 had a reservoir that was drinking water, that would
- 17 apply to you. It would not rigorously be applicable to
- 18 releases from low level waste burial grounds, and they
- 19 argued that you ought to take it out.
- 20 CHAIRMAN PALLADINO: Then how do you give
- 21 attention to drinking water problems?
- MR. MARTIN: We have dose limits in the rule
- 23 itself saying that you shall not have releases from the
- 24 site that would result in more than 25 millirem to any
- 25 individual outside the boundary, including people that

- 1 sink wells for water. That is the way we get to that 2 one.
- 3 CHAIRMAN PALLADINO: On page 18, you talk
- 4 about that you could not co-locate low level waste with
- 5 high level waste facilities, but should no-mingle the
- 6 wastes. Would there be any problem if low level wastes
- 7 were implaced in a high level facility?
- MR. SMITH: No.
- g CHAIRMAN PALLADINO: It is the other way
- to around .
- 11 MR. SMITH: Yes.
- 12 CHAIRMAN PALLADINO: I just wanted to make
- 13 sure that I hadn't missed something.
- on page 82, there seems to be a conflict, it
- 15 may be the way things are worded, between the top of 82,
- 16 where it says: "These persons shall file an application
- 17 with the Commission and obtain a license as provided in
- 18 this part before commencing construction of a land
- 19 disposal facility," and page 2 of Enclosure B. It may
- 20 be that I am misreading it. It says, "Finally,
- 21 discussed many alternatives to --
- 22 What I am getting at, it says, "There are
- 23 examples that will illustrate whether licensing should
- 24 be a one-step or two-step process. A one-step process
- 25 was chosen, eliminating the construction authorization

- 1 phase."
- 2 If you are going to eliminate the construction
- 3 authorization phase, how do you go about not beginning
- 4 construction until you get the permit?
- 5 MR. MARTIN: The problem on page 82 is at the
- 6 top?
- 7 CHAIRMAN PALLADINO: Yes, at the top of the
- 8 page.
- 9 MR. SMITH: I think the question that we
- 10 addressed back in Enclosure B is whether or not the
- 11 licensing process ought to be a two-step affair, as it
- 12 is with a reactor where you make a decision on
- 13 construction and allow them to construct, and then make
- 14 a decision on operation.
- 15 We chose not to go that way, but rather to
- 16 have a one-step licensing process which, when completed,
- 17 would authorize both the construction and the
- 18 operation. However, we put in this provision back here
- 19 on page 82 that says, "Don't start that construction
- 20 until you have got a license. Otherwise it jeopardizes
- 21 our decision-making for environmental impact."
- 22 CHAIRMAN PALLADINO: So you are saying that
- 23 there is no inconsistency.
- MR. SMITH: No, there is no inconsistency.
- 25 CHAIRMAN PALLADINO: I have one or two more.

- 1 On page 88 where it talks about record
- 2 keeping, you say that since this is going to affect less
- 3 than ten persons, we don't have to comply. How do you
- 4 know you are going to affect less than ten persons, we
- 5 don't know how many different disposals there might be.
- 6 MR. SMITH: Our judgment is that the total
- 7 number of facilities that will be created and that are
- g needed, and need has a lot to do with their creation,
- g will be less than ten.
- 10 COMMISSIONER AHEARNE: Persons in this sense.
- 11 CHAIRMAN PALLADINO: But I was not sure what
- 12 they meant.
- 13 MR. SMITH: The number of persons --
- 14 CHAIRMAN PALLADINO: You might have more than
- 15 ten facilities.
- 16 MR. SMITH: But the number of persons may be
- 17 and probably will be less than with various
- 18 organizations operating more than one facility.
- 19 MR. MARTIN: I guess we can't know for sure,
- 20 but if we ever ran into that problem, that will be a
- 21 happy day.
- (General laughter.)
- 23 CHAIRMAN PALLADING: What would happen if we
- 24 did run into that problem?
- 25 MR. MARTIN: We would have to go to OMB.

- 1 CHAIRMAN PALLADINO: I think one final one, if
- 2 you will bear with me for a minute.
- 3 On page 121, you say, "Waste must not be
- 4 package for disposal in cardboard or fiberboard boxes,
- 5 yet, they could be shipped in those.' How would you
- s handle it?
- 7 MR. SMITH: We were just simply saying that it
- 8 is Part 61 where we have addressed this issue, but the
- g transporter would have allowed it.
- 10 CHAIRMAN PALLADINO: They are allowed to ship
- 11 it, but you won't allow them to accept.
- 12 MR. MARTIN: We will not allow it at the
- 13 burial ground. So, in effect, they will not be any more
- 14 cardboard boxes.
- 15 CHAIRMAN PALLADINO: That is why I raised the
- 16 question earlier, because that was in there.
- 17 That is all I have. Do you have other
- 18 questions?
- commissioner Ahearne: I just have one, and
- 20 the one question relates to the change that was sent up
- on July 23rd, or July 22nd.
- In addition to 204 and 204Å, there is one
- 23 additional change, and that was sent in on July 22nd,
- 24 and it was a replacement of page 141 of Enclosure A of
- 25 204. It essentially deleted a section, and I wondered

- 1 if, Dale or Jack, you could explain what was deleted and 2 why it was deleted.
- 3 MR. MARTIN: Dale, to you have the letter?
- 4 MR. SMITH: I don't have the letter here. The
- 5 item that was deleted was a proposed new paragraph that
- 6 was in the proposed rule that had to do with Commission
- 7 of Board findings before the Office Director could be
- a permitted to issue a license. It is in the Section
- g 2.764, which has to do with immediate effective of the
- 10 initial decision.
- 11 COMMISSIONER AHEARNE: The previous version
- 12 would track more with procedure that we have with
- 13 respect to reactors?
  - 14 MR. SMITH: Yes.
  - 15 COMMISSIONER AHEARNE: Where the Commission
  - 16 would have to agree that the license should issue.
  - MR. MARTIN: Yes, and we changed it to check
  - 18 more in line with the material licenses.
  - 19 COMMISSIONER AHEARNE: Could you say a few
  - 20 words as to why. As I recall, in previous debates it
  - 21 had been put in, so I wonder why you reached the
  - 22 decision that you should take it out.
  - MR. SMITH: Jack.
  - MR. MARTIN: I think the conclusion was that
  - 25 there is nothing we could see about a low level waste

- 1 site that would be of such importance that it merited
- 2 going through the Commission review.
- 3 We diin't see that there was much difference
- 4 than a uranium node or fuel fabrication plants, and it
- 5 seemed an unnacessary burden on an already Commission,
- 6 so we decided to take it out, or proposed taking it
- 7 out.
- 8 COMMISSIONER AHEARNE: What great grief would
- g it cause if it went back in?
- 10 MR. MARTIN: None.
- 11 CHAIRMAN PALLADINO: This is the July 27th
- 12 memo?
- 13 COMMISSIONER AHEARNE: The memo of July 22nd.
- 14 CHAIRMAN PALLADINO: The 22nd.
- 15 COMMISSIONER AHEARNE: The 22nd.
- 16 CHAIRMAN PALLADINO: Where is it from?
- 17 COMMISSIONER AHEARNE: It is just from the
- 18 Secretariat. It says, "Correction Notice to 204.
- 19 Please replace."
- 20 CHAIRMAN PALLADINO: I didn't catch up with
- 21 it.
- 22 Do you have any other questions?
- 23 COMMISSIONER AHEARNE: No questions, but a
- 24 conment.
- 25 CHAIRMAN PALLADINO: All right.

- 1 COMMISSIONER AHEARNE: I would like to move
- 2 that the Commission vote to approve it, and I would
- 3 replace the previous section.
- 4 CHAIRMAN PALLADINO: I was going to urge that
- 5 we pull out our vote sheets and do it within the next
- 6 couple of days.
- 7 COMMISSIONER AHEARNE: Could I move to vote to
- 8 approve it subject to that one issue, then.
- 9 CHAIRMAN PALLADINO: Yes.
- 10 COMMISSIONER AHEARNE: It has been with us
- 11 such a long time that I would like to move it as close
- 12 as possible --
- 13 MR. MARTIN: If we could get a vote putting
- that back it, it would look a lot more attractive.
- (General laughter.)
- 16 COMMISSIONER ROBERTS: What did you say?
- 17 COMMISSIONER AHEARNE: He said he would be
- 18 willing to trade.
- 19 COMMISSIONER ROBERTS: Why do you want to put
- 20 it back in?
- 21 COMMISSIONER AHEARNE: You see, I feel that
- 22 there are only a few, as it was just discussed, there
- 23 will only be a few sites.
- 24 COMMISSIONER ROBERTS: Yes.
- 25 COMMISSIONER AHEARNE: So getting a low level

- 1 waste site into a state, I expect, will nevertheless
- 2 still be a major local issue. Therefore, I think that
- 3 it would be appropriate for the Commission to take
- 4 action and vote on it, similar to the Commission voting
- 5 on immediate effective for a reactor.
- 6 COMMISSIONER ROBERTS: Is there a perception
- 7 in that?
- 8 COMMISSIONER AHEARNE: I guess it is a
- g combination of -- As I see the whole waste area, it is
- 10 primarily one of institutional problems, whether it is
- 11 high level waste or low level waste. It is not so much
- 12 a technical issue. So it is a number of people being
- 13 willing to stand out and say, yes, we are willing to
- 14 take the responsibility for it.
- 15 So, I would expect that similarly, as the
- 16 governor of a state is going to have to do that, I think
- 17 it is appropriate for us to do it on siting a waste
- 18 site. That is why I thought it was better to do it.
- 19 MR. MAPTIN: I don't think we have any problem
- 20 With that.
- 21 CHAIRMAN PALLADINO: I am willing to vote,
- 22 reserving on this.
- 23 COMMISSIONER AHEARNE: Can we vote on it
- 24 reserving?
- 25 CHAIRMAN PALLADINO: Then, as soon as I get a

- 1 chance, to look at that.
- 2 COMMISSIONER ASSELSTINE: I am prepared to
- 3 vote to accept the rule. I guess I am not persuaded
- 4 that we ought to retain the authority for the low level
- 5 waste sites on that item, but as far as the balance of
- 6 the rule goes, yes.
- 7 CHAIRMAN PALLADINO: What are you saying about
- a that?
- g COMMISSIONER ASSELSTINE: I am not prepared to
- 10 agree to John's proposal, I don't think, at this point,
- 11 on adding in that element. But I am prepared to vote on
- 12 the balance of the rule.
- 13 CHAIRMAN PALLADINO: All right.
- 14 (Voting was unanimous.)
- 15 CHAIRMAN PALLADINO: You have four votes.
- 16 COMMISSIONER AHEARNE: We will vote later on
- 17 on that other.
- 18 CHAIRMAN PALLADINO: I will try to do that, if
- o possible today.
- 20 COMMISSIONER ASSELSTINE: I have just one
- 21 other quick comment, and that is on that EPA standard
- 22 problem. I wonder whether we continually see these
- 23 recurring problems where EPA has standard setting
- 24 authority, where we hear that they might exercise that
- 25 authority at some point down the road.

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1 We have other areas where we clearly need
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- 2 standards, and we keep getting promises that these
- 3 standards are going to be forthcoming and they are not.
- 4 We have written letters on high level waste standards.
- 5 As far as I am aware there has been no motion on that.
- 6 I wonder whether we ought to consider asking
- 7 Ms. Gorsuch and Dr. Hernandez to come ove to talk about
- a the problem of standards, and working out a formal --
- g COMMISSIONER AHEARNE: If you wish to have
- 10 someone come over, I don't think that it is the right
- 11 location on high level waste. I think it is a building
- 12 a lot closer than the EPA headquarters, if you really
- 13 want to have someone over here to discuss that problem.
- 14 CHAIRMAN PALLADINO: I participated in a
- is meeting, I don't know whether it was yesterday or the
- 16 day before, where we tried to see if we could do some
- 17 blasting, at least on the high level waste. All that I
- in can say is that people dug into their positions harder
- 19 than ever, OMB feeling that the guidelines should not be
- on a part, and the EPA feeling they should, and that is
- 21 Where the issue is.
- 22 COMMISSIONER ASSELSTINE: The high level
- 23 Waste, there may be that special incentive there.
- I guess one of the things that I am interested
- 25 in in the other areas is that we have areas like low

- 1 level waste, decommissioning, disposal of low level
- 2 waste. I think that it might not be a bad idea to try
- 3 and work out a more formal understanding with EPA on
- 4 what areas they are going to establish standards in, and
- 5 when they are going to establish those standards,
- 8 because, I think, depending upon those standards, some
- 7 of those we really do need.
- 8 CHAIRMAN PALLADINO: Sure.
- g COMMISSIONER ASSELSTINE: Other ones are not
- 10 that essential.
- 11 COMMISSIONER AHEARNE: My comment, though, was
- 12 not a facetious one. I am not a defender of EPA. I
- 13 have criticized them guite bluntly in front of the
- 14 Congress and elsewhere. But if we are going to try to
- 15 reach some agreement with EPA as to what they are going
- 16 to do and when, we have got to bring other people
- 17 involved.
- 18 COMMISSIONER ASSELSTINE: I agree.
- 19 COMMISSIONER AHEARNE: They don't have the
- 20 freedom we do.
- 21 CHAIRMAN PALLADINO: Why don't we look at
- 22 that.
- Is there anything more that should come before
- 24 US?
- I think we have set a new record. That clock

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1 says 11:30, and that the announced ending time. We will
 2 stand adjourned.
      (Whereupon, at 11:30 a.m., the meeting
 4 adjourned.)
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#### NUCLEAR REGULATORY COMMISSION

This is to certify that the attached proceedings before the COMMISSION MEETING

	of: PUBLIC MEETING - DISCUSSION OF 10 CFR PAR	
"LICENSING REQ	Date of Proceeding: October 22, 1982  Docket Number:	TE"
	Place of Proceeding: Washington, D. C.	

were held as herein appears, and that this is the original transcript thereof for the file of the Commission.

Patricia A. Minson

Official Reporter (Typed)

Official Reporter (Signature)

# 10 CFR PART 61 "LICENSING REQUIREMENTS FOR LAND DISPOSAL OF RADIOACTIVE WASTE" FINAL RULE

U.S. NUCLEAR REGULATORY COMMISSION
1982

#### BACKGROUND

0	OCTOBER 1978	ADVANCE NOTICE
0	NOVEMBER 1979	PRELIMINARY DRAFT
0	1980	FOUR REGIONAL WORKSHOPS
0	JULY 1981	PROPOSED RULE
0	OCTOBER 1981	DRAFT EIS
0	JANUARY 1982	END OF COMMENT PERIOD ON RULE AND DEIS
0	MAY 1982	SECY-82-204 (FINAL RULE)
0	JULY 1982	SECY-82-204A (FINAL EIS)
0	JULY 1982	COMMISSION BRIEFING
0	JULY 23, 1982	ELD INFORMATION MEMO
0	AUGUST 20, 1982	EDO INFORMATION MEMO

### PUBLIC RESPONSE TO SECY-82-204

- O MUCH INTEREST IN STATUS AND WHEN WILL RULE BE PUBLISHED
- O FEW PUBLIC FOLLOW-UP COMMENTS OR PROBLEMS

## ISSUES ADDRESSED SUBSEQUENT TO SECY-82-204

- O GENERAL NATURE OF ISSUES
  - -- NONE WERE NEW
  - -- NONE REQUIRE SUBSTANTIVE RULE CHANGES AND STAFF PLANS MINOR EDITORIAL AND CLARIFYING CHANGES
- O ORIGIN OF ISSUES
  - -- PROMPTED BY FEEDBACK FROM SEVERAL SECTORS, SUCH AS INDUSTRY, STAFF, COMMISSIONERS, DOE

TIME LIMITS FOR PART 61

SOURCE:

STAFF AND COMMISSIONERS

- O RESPONSE TIME FOR SUBMITTAL OF PROPOSALS FOR STATE PARTICIPATION BY HOST OR COMPACT STATES WILL BE INCREASED FROM 15 TO 45 DAYS
- O EFFECTIVE DATE OF 10CFR20.311 ON MANIFESTS AND LICENSEE COMPLIANCE WITH WASTE FORM AND CLASSIFICATION REQUIREMENTS WILL BE INCREASED FROM 120 DAYS TO 365 DAYS

## STATUS OF IMPLEMENTATION OF PART 61 PROVISIONS BY AGREEMENT STATES

- -- INTERIM IMPLEMENTATION AT EXISTING SITES
  - O GENERAL AGREEMENT WITH RULE BUT WORKING WITH STATES INDIVIDUALLY
  - O MET TWICE WITH SC
  - O MEETING WITH WASHINGTON AND NEVADA END OF MONTH FOLLOWING ANNUAL AGREEMENT STATE MEETING
- -- ADOPTION BY ALL AGREEMENT STATES
  - O CONFERENCE TASK FORCE
  - O MODEL REGULATIONS

IMPACT OF 300-YEAR INSTITUTIONAL CONTROL ON DOE PROGRAMS AND DOE REACTION TO SECY-82-204

SOURCE:

COMMISSION BRIEFING

- O STAFF CLARIFIED THE IMPACT OF 100 VS. 300 YEARS IN EDO'S MEMO TO COMMISSIONERS DATED 8/20/82
- O RE-EXAMINATION LED STAFF TO SAME CONCLUSION FOR COMMERCIAL WASTES AND SITES, I.E. 100 YEARS IS APPROPRIATE
- O DOE STAFF RESPONSE TO THE RULE WAS FAVORABLE

COST DATA ON ALTERNATIVES AS PRESENTED IN

SECY-82-204A (EIS SUMMARY) NEEDED CLARIFICATION

SOURCE:

AHEARNE BRIEFING

RESPONSE:

DATA CLARIFIED IN EDO'S MEMO TO COMMISSIONERS

DATED 8/20/82

DEPARTMENT OF INTERIOR (DOI) CERTIFICATION ON

CUSTODIAL CARE

SOURCE:

AHEARNE BRIEFING

RESPONSE:

ADDRESSED IN EDO'S MEMO TO COMMISSIONERS DATED

8/20/82

-- LEGAL VIEW THAT DOI COULD LEASE LAND AND CERTIFY ON CUSTODIAL CARE AS CALLED FOR IN §61.14(A) OF PART 61

-- DOI IS RELUCTANT TO DO SO

LEGAL VIEWS ON STATUS OF WASTES EXCEEDING CLASS C
CONCENTRATIONS, LEGAL AUTHORITY FOR LONG-TERM FINANCIAL
ASSURANCES, AND STATUS OF INDIAN TRIBES

SOURCE:

AHEARNE BRIEFING

RESPONSE:

LEGAL VIEWS PROVIDED IN ELD'S MEMO TO AHEARNE DATED 7/23/82

- -- WASTE EXCEEDING THE LIMITS OF CLASS C DOES NOT BECOME HIGH LEVEL WASTE
- -- COMPLEXITIES OF LEGAL AUTHORITY FOR FINANCIAL ASSURANCES REVIEWED
- -- TRIBES FALL IN "OTHER ENTITY" CATEGORY BY PROCESS
  OF ELIMINATION

NEED FOR DE MINIMIS

SOURCE:

HEALTH PHYSICS SOCIETY COMMITTEE CHAIRMAN

RESPONSE:

STAFF REAFFIRMED COMMITMENT TO EXAMINE WASTE STREAMS

ON A CASE-BY-CASE BASIS INDEPENDENT OF PART 61 TO

DETERMINE STREAMS WHICH MAY BE DISPOSED OF BY LESS

RESTRICTIVE MEANS OR WHICH ARE OF NO REGULATORY

CONCERN RATHER THAN GENERIC APPROACH

CONCERN WITH HOW REACTOR PLANTS CAN DEMONSTRATE
COMPLIANCE WITH WASTE CLASSIFICATION

SOURCE:

UTILITY NUCLEAR WASTE MANAGEMENT GROUP (UNIMMG)

- -- BASED ON THE RESULTS OF A PILOT PROGRAM WITH VERMONT
  YANKEE AND MAINE YANKEE, STAFF EXPECTS THE IMPACTS ON
  UTILITIES COMPLYING WITH WASTE CLASSIFICATION TO BE
  SMALL
- -- STAFF GUIDANCE IN THE BTP IDENTIFIES OPTIONS
  AVAILABLE OTHER THAN DIRECT MEASUREMENTS
- -- STAFF PLANS TO WORK WITH INDUSTRY GROUPS, (SUCH AS UNWMG), SPECIFIC UTILITIES, AND IE, TO PREVENT MISUNDERSTANDINGS WHICH COULD RESULT IN OVERLY STRICT INTERPRETATIONS OF PART 61 REQUIREMENTS

PRESENCE OF 1% FREE LIQUIDS IN DEWATERED WASTES (E.G. RESINS) IS NOT STATE-OF-THE-ART AND THUS NOT ALARA

SOURCE:

DOW CHEMICAL COMPANY AND BADER OF CRB ASSOCIATES

RESPONSE:

STAFF RE-EXAMINED THE FREE LIQUID QUESTION AND CONCLUDED THAT THE RECOMMENDATIONS IN SECY-82-204 REMAIN VALID BASED ON:

- O LOW CONCENTRATIONS OF RADIOMUCLIDES IN SMALL QUANTITIES OF FREE LIQUIDS (UP TO 1%) DO NOT POSE HEALTH AND SAFETY PROBLEMS
- O THE REVISED 10 CFR 61 FREE LIQUID LIMITS AND FLEXIBILITY TO USE HIGH INTEGRITY CONTAINERS REPRESENT WHAT IS REASONABLY ACHIEVABLE USING CURRENT TECHNOLOGY

HIGH INTEGRITY CONTAINERS NOT A PROVEN ALTERNATIVE TO SOLIDIFICATION

SOURCE:

DOW CHEMICAL COMPANY AND BADER OF CRB ASSOCIATES

- O PRELIMINARY STAFF REVIEW OF HIGH INTEGRITY CONTAINER VENDOR DATA HAS NOT IDENTIFIED ANY TECHNICAL AREAS WHICH WOULD PRECLUDE CONSIDERING HIGH INTEGRITY CONTAINERS AS AN ACCEPTABLE ALTERNATIVE TO SOLIDIFICATION
- O STAFF REAFFIRMED THE VALUE OF FLEXIBILITY IN MEETING THE STABILITY REQUIREMENTS AS PRESENTED IN PART 61 IN THAT STABILITY CAN BE PROVIDED BY:
  - -- WASTE FORM
  - -- WASTE CONTAINERS
  - -- DISPOSAL STRUCTURES

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