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12	PUBLIC COMMENT ON CERT	IFICATION OF WASTE ISOLATION	
13	PILOT	PILOT PROJECT	
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15	TUESDAY, JANUARY 6, 1998		
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19	EPA PANEL:	RICHARD WILSON LARRY WEINSTOCK	
20		FRANK MARCINOWSKI MARY KRUGER	
21		MAKI KROGER	
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DAY 2 - JANUARY 6, 1998 - CARLSBAD, NEW MEXICO

SANTA FE DEPOSITION SERVICE (505) 983-4643

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- 1 PROCEEDINGS
- 2 TUESDAY, JANUARY 6, 1997, 9:00 A.M.
- 3 MR. WILSON: Good morning. I'm Dick Wilson
- 4 from EPA. I see a lot of faces from last night, so I'm
- 5 not going to go through the whole opening statement I
- 6 did last night with all the background, but I will
- 7 spend a minute or two for anybody who wasn't here last
- 8 night on the ground rules.
- 9 First of all, I would just introduce the other
- 10 people. Besides me on the panel, Larry Weinstock,
- 11 Frank Marcinowski and Mary Kruger, all from EPA
- 12 working on the WIPP issue.
- We have a -- we'll be here most of the day.
- 14 If anybody is here who hasn't signed up and wants to
- 15 make a statement, please let us know, or if you know
- 16 anybody else around, we do have plenty of time today
- 17 for folks.
- 18 We may end up -- because we have, I think,
- 19 more time than people, we may try and end a little
- 20 sooner than the 4:00 o'clock time frame we had planned.
- 21 But we'll see how that goes. We want to make sure
- 22 everybody who signed up has a chance to talk.
- 23 The sort of the rules for the hearing -- it's
- 24 an informal hearing, so people have five minutes if you
- 25 are an individual, or ten minutes if you are an

1 organization. There's no cross-examination, although

- 2 panel members may ask a question or two. There's a
- 3 transcript of the hearing being made. It will be
- 4 available in two or three weeks.
- 5 And I think that's about it, so we'll start.
- 6 The first person on the list is Jeff Neal.
- 7 Jeff, good morning.
- 8 MR. NEAL: Hi.
- 9 My name is Jeff Neal, and I'm a lifelong
- 10 resident of Carlsbad. There's been three generations
- 11 of Neals who have lived in the area, and I hope that my
- 12 future descendents also live here in Carlsbad.
- 13 Carlsbad has been involved in atomic research
- 14 all way back to Project Gnome. Project Gnome was
- 15 defined an alternate energy resource. I can remember
- 16 sitting in church at 11:00 o'clock and feeling the
- 17 church shake as it went off. Carlsbad stepped forward
- 18 then to try to find an alternate energy source and help
- 19 the atomic energy industry.
- The WIPP project has been in the planning
- 21 stage for 22 years. Here again, Carlsbad stepped
- 22 forward to help the nation, to help the nation solve
- 23 its low-level transuranic waste problem. The potash
- 24 industry here in Carlsbad has been helping the nation
- 25 in supplying fertilizer to farmers for over the last 50

1 years. We have provided fertilizer to help feed the

- 2 nation and the world. Carlsbad has also provided our
- 3 nation with entertainment in the natural resource of
- 4 the Eighth Wonder of the World, Carlsbad Caverns
- 5 National Park.
- 6 Carlsbad is known for helping the nation. In
- 7 World War II the New Mexico National Guard was involved
- 8 in what was called the Bataan Death March. We as a
- 9 community know what it means to serve our nation.
- 10 Here again, Carlsbad has stepped up to the
- 11 bat to help the nation. WIPP is a national solution to
- 12 solve a national problem. No other project in the
- 13 world has gone through such extensive technical and
- 14 public review. Top scientific and engineering minds
- 15 have researched this. International, independent, and
- 16 public oversight groups have scrutinized this project
- 17 from all angles. This project has set new and
- 18 extremely demanding standards to demonstrate the
- 19 compliance to regulations, and it has performed and
- 20 provided the needed documents.
- 21 It is simple. WIPP is designed to permanently
- 22 and safely dispose of the transuranic waste. They have
- 23 met the requirements.
- 24 You know that what really tickles me the
- 25 most, and all due respect to Bob Neill and the New

1 Mexico Environmental Department is the concerns about

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- 2 the drilling of wells for the immediate future, let's
- 3 say 50 years. The laws, rules, regulations will
- 4 restrict the oil industry from drilling in the area.
- 5 After that, let's says 500 years, there's going to be
- 6 an alternate energy resource. Natural resources will
- 7 be depleted. Oil and gas will be useless, so there
- 8 will be no longer any need to search for this.
- 9 I quess he hasn't seen the movie Back to the
- 10 Future.
- 11 But, more seriously, what really intrigues me
- 12 most on the backfill is the magnesium oxide to
- 13 stabilize radionuclides. Now, today this radioactive
- 14 waste presents risks to about 60 million people who
- 15 live within 50 miles of the more than 20 storage sites
- 16 across the U.S. Here is Carlsbad is saying: Yes, put
- 17 it in my back yard.
- 18 Wake up everybody. Not anyplace in the world
- 19 wants it.
- 20 This salt in this formation has been
- 21 stabilized for more than 200 million years, and that
- 22 surely fits into 10,000 year requirement.
- Thank you.
- MR. WILSON: Thank you for coming this
- 25 morning and giving us your testimony.

- 1 Betty Richards. Good morning.
- 2 MS. RICHARDS: Good morning.
- 3 MR. WILSON: We need an automatic -- maybe you
- 4 could just flip it down.
- 5 No, it's not going to -- it's the tape at the
- 6 bottom.
- 7 MS. RICHARDS: You can probably hear me
- 8 without, I think. Maybe.
- 9 MR. WILSON: There you go.
- 10 MS. RICHARDS: There's three kinds of people.
- 11 People who can count, and people who can't count.
- 12 What I really want to discuss is what I consider
- 13 to be the basic 3R's: Rules and regulations, rights, and
- 14 responsibilities.
- 15 Everyone goes by many sets of rules. Civic
- 16 rules, social rules, moral rules, traffic rules, house
- 17 rules, et cetera. Rules, rules, rules.
- 18 What rules do you go by? Do you often
- 19 swallow your own personal rules to go along with the
- 20 Good-Old-Boy rules?
- 21 Rules can be changed with the stroke of a
- 22 pen. A case in point: The WIPP could not comply with
- 23 the criteria, so they change that criteria to fit the
- 24 site.
- 25 What concerns me is that the DOE and the EPA

1 have conspired to give the appearance of compliance

- 2 with waste disposal rules when it is obvious to many
- 3 that WIPP fails -- The WIPP fails.
- 4 Are you going to pass the athlete who can't
- 5 read so that he can play football?
- 6 Rules and regulations are written for the
- 7 rule abiding. Those inclined to circumvent the rules
- 8 will do so, regardless of any rule enacted.
- 9 Rights. The Constitution of the United
- 10 States is unmatched in the world for vesting its
- 11 citizens with inalienable rights. We have the right of
- 12 free speech, the right to worship, travel, educate
- 13 ourselves, and the right of choice, as long as that
- 14 choice does not injure others. But do we have the
- 15 right to continue practices that we know will fail?
- 16 Isn't that the definition of insanity, to keep doing
- 17 the same thing over and over again and expecting
- 18 different results?
- 19 Do we have the right to continue policies
- 20 that are questionable in their results?
- 21 WIPP is a glorified ditch. The money that
- 22 has been spent is an embarrassment. Yet it epitomizes
- 23 government waste. Pun intended.
- 24 With every right comes responsibilities, and
- 25 that brings us to the most important of the 3R's. We

1 are so concerned with our rights in this country that

- 2 we clearly neglect our responsibilities. Who is going
- 3 to take responsibility for the WIPP when it becomes
- 4 obvious that the waste is not contained? Westinghouse?
- 5 DOE? EPA?
- 6 Government holds citizens responsible, yet
- 7 does not hold itself responsible.
- 8 Example: Our State Transportation Secretary,
- 9 Pete Rahn, stated in a recent meeting that the
- 10 transportation route from the south is safer coming
- 11 through town than by using an existing bypass, yet they
- 12 are funding a \$15 million bypass for the north end of
- 13 Carlsbad.
- 14 Why is it safe to drive the waste through the
- 15 south end of town and not safe to drive it through the
- 16 north end of town?
- 17 I think that every person who believes that
- 18 the WIPP will isolate radioactive waste should sign a
- 19 contract that guarantees he will forfeit all he owns or
- 20 will ever own, or that his progeny will own, if WIPP
- 21 fails to isolate radioactive waste.
- How about it, Wendell Weart? How about it,
- 23 George Dials?
- 24 There are three kinds of people: People who
- 25 can count, people who can't count, and people who

1 manipulate the numbers in order to confuse, confound

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- 2 and obfuscate.
- 3 MR. WILSON: Thank you very much for taking
- 4 the time to come here this morning and give us your
- 5 testimony.
- 6 Vicky Black?
- 7 MS. BLACK: We are ahead of schedule. I
- 8 wasn't quite ready.
- 9 MR. WILSON: Take your time.
- 10 MS. BLACK: I just have to be able to see.
- 11 MR. WILSON: Thank you. Take your time.
- MS. BLACK: As I said, I'm Vicky Black. I
- 13 moved to Carlsbad three years ago as the business
- 14 manager for Sandia on the WIPP project.
- 15 Although I'm not involved in the technical
- 16 work of WIPP, I'm quite aware of the cost to the
- 17 taxpayer of delaying WIPP's opening. Taxpayers have
- 18 paid almost \$2 billion to get the WIPP to the point it
- 19 is today, and it's time to quit spending our taxes
- 20 marking time, maintaining a ready repository, and time
- 21 to use our tax dollars to get on with it to help solve
- 22 a national problem.
- 23 Through my association with Sandia Labs I
- 24 have had the opportunity to personally see some of the
- 25 material destined for WIPP: Wipes, old metal parts,

- 1 lab coats, et cetera. Nothing was glowing. Indeed,
- 2 most of it is contact handled, which means I could push

- 3 a barrel of it dressed as I am today.
- 4 As a citizen and a taxpayer, I find it
- 5 impossible to understand why the self-proclaimed
- 6 environmentalists who oppose the opening of the WIPP do
- 7 not see that it is indeed the environmentally right
- 8 thing to do. How can storing this waste in barrels
- 9 above ground near millions of people be environmentally
- 10 correct?
- I read in the draft Rule that there's
- 12 concerns relating to human intrusion into the WIPP
- 13 site. What about human intrusions, terrorists and
- 14 natural disasters, wreaking havoc on an above-ground
- 15 warehouse?
- 16 Also, there will be active controls at WIPP
- 17 for the next hundred years. This means that someone
- 18 will be guarding the site for 100 years. Are we to
- 19 believe that after that time man will cease to be able
- 20 to read posted warning signs?
- 21 I personally believe that the opposition to
- 22 WIPP is political and not based on the need to protect
- 23 the citizens of this country. As to the common
- 24 refrain, "Not in my backyard," as far as I know, we all
- 25 agreed following the Civil War that we would be the

1 United States of America, "United" being the operative

- 2 word. I have relatives in Denver, some friends in
- 3 Idaho, and my back yard extends to include them.
- 4 As a dominant world power, our leaders made
- 5 the decision to stockpile nuclear weapons as a
- 6 deterrent to nuclear war. There is a byproduct to this
- 7 decision that must be dealt with. WIPP is part of that
- 8 solution.
- 9 Thank you.
- 10 MR. WILSON: Okay. Thank you very much for
- 11 coming.
- 12 Bob Neill.
- 13 MR. NEILL: My name is Bob Neill, and I'm
- 14 the Director of the New Mexico Environmental Evaluation
- 15 Group.
- I have been honored in the work in
- 17 radioactive waste disposal to have served on three
- 18 different EPA Advisory committees and two DOE advisory
- 19 committees, and I have been either a member or
- 20 consultant to three National Academy of Sciences
- 21 committees over the years. The first one, I hate to
- 22 say, goes back to 1958. A long time ago.
- 23 As you know, the EEG is the only full-time,
- 24 independent, multi-disciplinary, scientific oversight
- 25 group for the WIPP project established in 1978 with

1 funds by the DOE to conduct an independent, technical

- 2 evaluation to ensure the protection of the public
- 3 health and safety and the environment of New Mexico.
- 4 While lacking regulatory authority, the EEG has a broad
- 5 oversight function, including the operational aspects
- 6 of the project.
- 7 I represent the State of New Mexico in review
- 8 and evaluation of the Safety Analysis Report by State
- 9 Statute.
- 10 I first want to thank you for holding these
- 11 these hearings here in New Mexico to provide an
- 12 opportunity for both the citizens and the
- 13 organizations, official agencies to express their views
- 14 on the EPA's proposed rule on the certification
- 15 decision for WIPP. I also want to congratulate you for
- 16 doing a remarkable job of reviewing the DOE's massive
- 17 application in a very short period of time. As we
- 18 know, the standards were issued in '85 and New Mexico
- 19 entered into an agreement, so it took DOE 11 years to
- 20 prepare the Certification Application to comply with
- 21 those standards, and your staff obviously made a
- 22 Herculean effort in reading and absorbing the DOE
- 23 submissions, conducting selected independent analyses,
- 24 and preparing documentation of the proposed rule at
- 25 several levels of detail, with cross referencing. We

1 are aware of the dedicated hard work that such an

- 2 effort requires. Indeed, the DOE Application
- 3 demonstrated such dedication, as well.
- 4 Thee WIPP inventory includes 28,400 pounds of
- 5 Plutonium-239, the dominant radionuclide. In fact,
- 6 about 85 percent of the radioactivity at 100 years will
- 7 be Plutonium-239.
- 8 One still encounters reference in the press
- 9 to this being low level. It is not. It is transuranic
- 10 waste, and we certainly would not be spending \$19
- 11 billion if this were a low-level waste facility.
- Now, it's inevitable there be large
- 13 uncertainties in projecting the integrity of a
- 14 depository for a 10,000 year period. EPA recognized
- 15 this fact and included assurance requirements in
- 16 addition to the numerical "containment requirements."
- 17 Clearly, the repository is located in a
- 18 mineral-rich resource-rich area. The intensity for
- 19 drilling for oil and gas around the 4 mile by 4 mile
- 20 WIPP site is very high, and almost certainly the only
- 21 reason that there's no drilling within the site is it
- 22 has been withdrawn for exclusive use by WIPP.
- 23 Although potash mining and the production of
- 24 oil and gas were recognized in the '70s when the site
- 25 was selected, the intensity of the exploration and the

1 production of oil and gas increased in the late '80s.

- 2 We recognized this. We have been pressing for two
- 3 major actions.
- 4 One: All the implications of the resource
- 5 exploitation activities be taken into account in
- 6 projecting the potential scenarios for future
- 7 inadvertent breach of the site and in computing the
- 8 effects of those scenarios; in particular, the
- 9 consequences of air drilling and fluid injection, and
- 10 mining, including solution mining activities, require
- 11 additional attention from the EPA.
- 12 While it's been noted that the WIPP area may
- 13 well be the most studied piece of real estate in the
- 14 world, we might also note that it probably has the most
- 15 intense oil and gas exploration activities going on of
- 16 any site. I have no data for it, but it's an extremely
- 17 intense one.
- No. 2: The waste should be treated to make
- 19 it more difficult to be dispersed in the environment in
- 20 case of breach. The most recent plan indicates that
- 21 DOE has plans to treat or repackage 85 percent of the
- 22 existing TRU waste. As we know, only about half the
- 23 waste slated to come to WIPP exists today. The other
- 24 has yet to be produced. The DOE proposed action in the
- 25 CCA which was submitted to EPA is to have the waste

1 meet the Waste Acceptance Criteria before shipment to

- 2 the generator sites. This is inconsistent with the
- 3 preferred alternative identified by the Department of
- 4 Energy in the May, 1997 Programmatic Environmental
- 5 Impact Statement which identifies the preferred
- 6 alternative, which is to treat the wastes prior to
- 7 shipment to WIPP.
- 8 We noted DOE is planning on doing 85 percent,
- 9 and we think also DOE should stand up and take credit
- 10 for this, and EPA should acknowledge those efforts as
- 11 well, or certainly DOE should be encouraged to do this,
- 12 to make the waste form less likely to be released into
- 13 the environment.
- 14 Can't help but note certain low-level wastes
- 15 have greater requirements for longevity for either the
- 16 waste form or container than for WIPP. Low level
- 17 graded in Class C requires a 300-year waste form or a
- 18 300-year container. There are no longevity
- 19 requirements on either the waste form or the container
- 20 for the WIPP.
- 21 EEG has extensively reviewed the
- 22 interpretations of the field and laboratory
- 23 observations; assumptions of future events and
- 24 processes that may affect the integrity of the
- 25 repository for 10,000 years; justification for the

- 1 parameters values gone through the -- and we have
- 2 identified certain problems which were identified in
- 3 the December 31 -- We have had a number of meetings
- 4 with EPA Staff, and at a December 10 meeting the staff
- 5 requested we provide greater specificity in addressing
- 6 some of our concerns. To that end, we put out a
- 7 December 31 letter to Mr. Marcinowski with copies to
- 8 the appropriate staff, and copies of that are available
- 9 for anyone wishing to see them. The 14-page letter
- 10 plus the attachments is about a 50-page documentation.
- 11 There's no way to, obviously, go through that today,
- 12 but I wanted to identify these issues.
- 13 I'll skip into -- We have identified
- 14 problems with the conceptual and numerical models in
- 15 the CCA, the values selected for some of the critical
- 16 parameters used on the computations, certain critical
- 17 scenarios rejected on the basis of low consequence or
- 18 low probability, inadequate attention paid to the waste
- 19 inventory.
- 20 This inventory keeps changing markedly. The
- 21 last two reports by DOE indicate that the existing
- 22 transuranic waste at a number of sites have changed by
- 23 a factor, in one case 10 to the 3, and in other case by
- 24 a factor of 5. This isn't fine tuning.
- 25 This does suggest there is some major concern

1 with the existing inventories that we have on our

- 2 hands.
- In reviewing compliance, it's become clear
- 4 that the compliance is very sensitive to the models and
- 5 parameters selected. For example, the solubility of
- 6 plutonium and the brines postulated to be present in
- 7 the WIPP repository determines how much plutonium will
- 8 be released to the environment if a given volume of
- 9 brine is released.
- 10 Cutting to the short on this, DOE is planning
- 11 on using a magnesium oxide backfill. The question that
- 12 occurs is whether chemical reactions will result. In
- 13 the reciprocated -- with nesquehonite rather than
- 14 hydromagnesite with clear water molecules, or the
- 15 actinides could be highly soluble in the presence of
- 16 nesquehonite.
- 17 (Note: Reporter interruption.)
- 18 MR. NEILL: You can have this. It's in
- 19 here.
- 20 The question arises as to what periods of
- 21 time that mineral phases may well be present.
- We have documented a number of concerns
- 23 similar to the examples I am just citing here, and the
- 24 most important ones are summarized in our December 31
- 25 letter to the EPA.

1 And I have mentioned the concerns about the

- 2 waste inventory characterization and the distribution
- 3 of different kinds of wastes in the repository.
- 4 Because of the synergistic effects of the
- 5 many models and parameter values used in the CCA, the
- 6 EEG has consistently advised the EPA to reject the idea
- 7 of accepting certain values on the basis of partial
- 8 sensitivity analysis. We do believe the models and the
- 9 parameters should be completely and satisfactorily
- 10 justified individually and the final set computations
- 11 should be run with fully justified values. Only then
- 12 can the compliance with the containment requirements be
- 13 determined.
- 14 During the remainder of the comment period we
- 15 expect to critically review some of the recommendations
- 16 of the NAS committee, as well as the OECD and the IAEA
- 17 report. For example, they both recommended that the
- 18 individual suggestions be prepared. They are not
- 19 required under the standards. We have done this, and
- 20 expect to publish that report, that work, within the
- 21 next few weeks.
- In conclusion, I want to thank you,
- 23 Mr. Chairman, for your patient hearing of our views
- 24 today, and hope that you would give serious
- 25 consideration to our recommendations. We look forward

1 to continuing constructive dialogue with you, and we

- 2 have been very pleased with the ability to work with
- 3 EPA staff over these -- not just months, but over the
- 4 years, in exchanging concerns, ideas, and addressing a
- 5 number of the issues to date.
- 6 Thank you.
- 7 MR. WILSON: Thank you, Mr. Neill, for coming
- 8 today, and thank you and your group, the Environmental
- 9 Evaluation Group, for all your work on this project for
- 10 the last several years.
- 11 Thank you.
- 12 The next witness is Joe Epstein from
- 13 Westinghouse.
- 14 MR. EPSTEIN: Good morning. I appreciate
- 15 the opportunity to offer my views on EPA's proposed
- 16 certification decision for WIPP. I'm Joe Epstein,
- 17 General Manager of the Westinghouse Waste Isolation
- 18 Division.
- I support the EPA's proposed Rule, and urge
- 20 you to complete final rule making quickly.
- 21 Westinghouse has been associated with the
- 22 WIPP for 20 years. We were selected as the WIPP
- 23 technical support contractor in '78, and have been the
- 24 management and operating contractor for DOE since
- 25 November of '85.

1 For these 20 years Westinghouse has worked

- 2 hand in hand with our partners, DOE, its predecessors,
- 3 and Sandia to develop the safest and most effective
- 4 disposal system for radioactive transuranic waste in
- 5 the world. The EPA's proposed rule, which proceeds its
- 6 decision to certify the WIPP, closes another chapter in
- 7 the story that will culminate later this year with the
- 8 opening of the nation's first permanent underground
- 9 repository for transuranic radioactive waste.
- 10 Westinghouse is proud of its achievements over
- 11 the past 20 years. Our priority has always been, and
- 12 will continue to be, environmental and safety
- 13 excellence. Compliance with regulatory requirements
- 14 is essential to our demonstration of excellence. We
- 15 are committed to implement to the fullest extent all
- 16 the requirements set forth in the EPA's certification
- 17 of the WIPP.
- 18 Our commitment to excellence in safety and
- 19 environmental management is evidenced by two very
- 20 special honors we have received. The first recognition
- 21 under DOE's prestigious voluntary protection program as
- 22 a VPP Star Status site, demonstrating excellence and
- 23 safety, and the second, registry by the International
- 24 Organization for Standardization's ISO 14001,
- 25 demonstrating excellence in environmental management.

1 In October, '94 Westinghouse became the first

- 2 management and operating contractor in the DOE complex
- 3 to receive Star status. Star status is the highest
- 4 level that can be achieved under the VPP guidelines.
- 5 Last summer we joined an elite class,
- 6 becoming the first nuclear facility, and only the 22nd
- 7 company nationally, to have received registration under
- 8 ISO 14001, a voluntary standard for developing and
- 9 implementing environmental management systems. ISO
- 10 14001 serves as a guide for environmental management
- 11 programs, and provides an internationally recognized
- 12 framework to measure, evaluate, and audit these
- 13 programs.
- Westinghouse's environmental management
- 15 system of the WIPP includes elements of policy,
- 16 planning, implementation, corrective actions, and
- 17 management review. We have been recognized numerous
- 18 times for a proper approach to protecting the
- 19 environment and employee safety and health. For
- 20 example, we received eleven consecutive New Mexico Mine
- 21 Operator of the Year awards, two recent Awards of Honor
- 22 from the National Safety Council, and outstanding Mine
- 23 Safety and Health Administration inspection results.
- In addition to this recognition, the Waste
- 25 Isolation division has a proven track record in other

- 1 areas of environmental compliance, including permits,
- 2 regulations, standards, inspections, and audits. More
- 3 than 24 associated environmental operating permits,
- 4 ranging from rights-of-way to discharge permits are
- 5 required to operate the WIPP. To date, there have been
- 6 no citations for environmental permit noncompliance.
- 7 In addition to the formal compliance
- 8 statements provided to the EPA on a biennial basis,
- 9 several regulatory oversight activity compliance
- 10 programs are conducted on a frequent basis. During
- 11 the closeout meeting following a recent New Mexico
- 12 Environmental Department RCRA inspection at the WIPP
- 13 site, the inspectors commented the WIPP was extremely
- 14 well run and, gave recognition to the positive attitude
- 15 of the work force.
- 16 As further confirmation of our commitment to
- 17 100 percent compliance, EPA administrator Carol Browner
- 18 acknowledged in an August '97 Federal Register notice
- 19 that for the period of October 1994 to October 1996 the
- 20 WIPP was in compliance with the pertinent federal
- 21 statutes and regulations in the 1992 Land Withdrawal
- 22 Act.
- 23 In addition to our safety and environmental
- 24 excellence, Westinghouse has gone to great ends to
- 25 ensure that the WIPP meets the highest standards

1 of operational excellence. In preparing to open the

- 2 WIPP later this year, we have been involved in a
- 3 variety of activities, including an actual performance
- 4 demonstration involving the WIPP transportation system.
- 5 This past September Idaho National Engineering and
- 6 Environmental Laboratory shipped three TRUpacts with 42
- 7 drums filled with sand as simulated waste to the WIPP.
- 8 Every DOE-specific procedure from inspection of the
- 9 mock waste shipment as it left the site in Idaho to
- 10 final unloading and emplacement in the underground at
- 11 the WIPP was tested during the in-depth exercise. In
- 12 addition to all the normal waste-disposal activities,
- 13 Westinghouse personnel participated in a series of
- 14 graded drills to judge response to off-normal events. A
- 15 variety of regulators, oversight groups and
- 16 stakeholders observed the demonstration. Westinghouse
- 17 successfully completed every aspect of the
- 18 demonstration with no deficiencies noted by the review
- 19 team.
- 20 Our state of readiness is further supported
- 21 by the DOE accreditation of our dosimetry program under
- 22 their Laboratory Accreditation Program which ensures
- 23 the quality of dosimetry results and staff competency,
- 24 by having successfully trained more than 12,000
- 25 emergency responders living along or near

1 transportation routes, and by having WIPP employees

- 2 participate in more than 100 drills that test their job
- 3 knowledge and skills, should there be an actual
- 4 emergency at the facility.
- 5 Our employees are among the safest in the
- 6 Department of Energy complex and the nation, because
- 7 they are highly trained and competent. They are the
- 8 energy that powers this facility. These are the same
- 9 employees that live and raise their families in
- 10 Carlsbad, which is located only 26 miles west of the
- 11 WIPP. They are, without a doubt, a highly trained
- 12 group of people who believe in the WIPP and want to get
- 13 the job done. They will be the first to tell you it's
- 14 fine to open the WIPP and begin dealing with an
- 15 environmental problem that has been ignored for far too
- 16 long. The scientists and design engineers have done
- 17 their jobs. Now let's do ours.
- One of our greatest achievements came in
- 19 October 94 when the CCA was submitted for EPA approval.
- 20 As you are fully aware, it took an extraordinary effort
- 21 to accomplish this feat. To say the compilation of
- 22 this document was monumental is an understatement. The
- 23 CCA development process and it's on-schedule submittal
- 24 further demonstrate the combined talent and dedication
- 25 of the DOE, Sandia, and Westinghouse team.

1 I would also like to take this opportunity to

- 2 publicly applaud the job EPA is doing. The CCA review
- 3 has not been a simple process, nor is it an easy
- 4 decision. Reviewing a technical document that consists
- 5 of tens of thousands of pages for final certification
- 6 of a first-of-a-kind facility is challenging, to say
- 7 the least. Add to that the fact that your decision
- 8 affects the lives of millions of Americans and the task
- 9 at hand is daunting.
- 10 Concerning the proposed rule, I would like to
- 11 request the EPA reconsider Conditions Nos. 2 and 3 of
- 12 its proposed certification decision for the WIPP.
- 13 These conditions address certifying the waste
- 14 characterization process for waste generator sites.
- 15 The DOE process for cite certification was fully
- 16 described in the CCA. Despite the stringent waste
- 17 certification program that is already in place, the EPA
- 18 is imposing upon the DOE an additional process that
- 19 involves placing site quality assurance documents into
- 20 the EPA docket, generating a Federal Register Notice of
- 21 Availability, and providing a 30-day public comment
- 22 period. This process must be completed before the EPA
- 23 conducts its own site certification audit.
- 24 I do not believe the EPA should be expected
- 25 to regulate waste characterization activities at the

- 1 generator site facilities by conducting its own
- 2 independent audits and inspections. This would add no
- 3 greater protection to the public and the environment
- 4 but would significantly and unnecessarily increase the
- 5 life cycle costs of transuranic waste characterization
- 6 activities and keep the risk where it presently is
- 7 longer.
- 8 The EPA and the public should be confident in
- 9 the environmental and safety excellence of the WIPP.
- 10 Safety and environmental excellence has been repeatedly
- 11 demonstrated at the WIPP because they are essential
- 12 elements of the Westinghouse culture.
- 13 Let me reiterate: As the management and
- 14 operating contractor for DOE at the WIPP, we are proud
- 15 of our achievements. Our job is environmental
- 16 excellence and safety. We are committed to it.
- 17 Thank you.
- 18 MR. WILSON: Thank you, Mr. Epstein.
- 19 I had one question.
- 20 You mentioned the waste characterization
- 21 issues. As I understand it, the waste won't be
- 22 characterized at the WIPP facility, so the facility is
- 23 dependent on the characterization that occurs at the
- 24 generating site.
- 25 Is that accurate?

- 1 MR. EPSTEIN: Dependent. But the DOE site
- 2 certification process certifies those sites as having
- 3 completed their characterization activities according
- 4 to their QAPD's, their waste handling into the TRUpact,
- 5 and their ability to operate the waste information
- 6 system, WIPP waste information system.
- 7 So the site certification by DOE -- that CAO,
- 8 that certification validates that their process has
- 9 been done correctly.
- 10 MR. WILSON: Uh-huh. And it's --
- MR. EPSTEIN: But we do not redo it here.
- 12 MR. WILSON: Right. And it's those, the
- 13 characterization plans that aren't complete for most of
- 14 the generating sites at this stage?
- 15 MR. EPSTEIN: No, the site certification has
- 16 only been accomplished for Los Alamos. The others are
- 17 on schedule. Idaho and Rocky Flats will be next,
- 18 within the January, February, March timeframe.
- 19 But all sites have been doing these things,
- 20 it's that they have to go through this rigorous site
- 21 certification process. That is the schedule that
- 22 DOE -- that CAO is for.
- 23 MR. WILSON: I'm not sure that I understood
- 24 why you think it's inappropriate and unnecessary to
- 25 have a public review process for the other site --

1 MR. EPSTEIN: It's the DOE site certification

- 2 process is thorough and robust. Having somebody else
- 3 redo that is not considered necessary. Hasn't been up
- 4 to this point.
- 5 MR. WILSON: I see.
- 6 MR. EPSTEIN: It's just not necessary. It's
- 7 redundant, and it doesn't really add anything more.
- Now, EPA checking that DOE has done its job
- 9 is right and appropriate. Redoing DOE's job is the
- 10 thing that I'm protesting, or suggesting that it be
- 11 eliminated.
- MR. WILSON: Okay. Thank you very much.
- 13 MR. EPSTEIN: Thank you.
- MR. WILSON: Dr. Richard Anderson.
- 15 Is Dr. Anderson here? Not here yet.
- We are ahead of schedule.
- 17 Is Phil Carroll here?
- 18 How about Anthony Hakl?
- 19 MR. HAKL: Hakl. I'm here.
- 20 MR. WILSON: Sorry about that.
- 21 MR. HAKL: That is all right. It's been
- 22 mispronounced at least once before.
- MR. WILSON: Thank you for coming.
- MR. HAKL: Thank you for having me.
- I have a hard --

- 1 MR. WILSON: I --
- 2 MR. HAKL: I have an extra copy, if you would
- 3 like it.
- Good morning. My name is Anthony R. Hakl,
- 5 and I am here in my capacity as the program manager for
- 6 the contract that Commodore Advance Sciences has with
- 7 the DOE Carlsbad Area Office. That contract is entitled
- 8 the Carlsbad Area Office Technical Assistance Contract,
- 9 and we most often refer to ourselves as CTAC.
- 10 Our resources utilized in support of the DOE
- 11 CAO activities are drawn from more than a dozen small
- 12 and medium-sized companies in New Mexico, with, in
- 13 total, several thousand technical staff. We provide
- 14 technical support services to the DOE in areas
- 15 important to the success and safe operation of the
- 16 Waste Isolation Pilot Plant. From a personal note, I
- 17 have been active and involved with the WIPP, beginning
- 18 with the original conceptual design in the mid '70s, so
- 19 I guess I can say I have a quarter of a century of WIPP
- 20 pedigree. I also am a resident of Carlsbad with my
- 21 wife Sandra.
- 22 My personal philosophy for what one does and
- 23 how you do it is quite straightforward: Do what is
- 24 right, and do the best that you can. That is the same
- 25 philosophy that my wife and I have shared with our four

1 children, and you can ask each one of them and they

- 2 will tell you two things. They are: Do what is right.
- 3 Do the best that you can.
- I mention this philosophy because I believe
- 5 the WIPP embodies both of these points. The terminal
- 6 disposal of radioactive materials in bedded salt is the
- 7 right thing to do. The WIPP as designed and to be
- 8 operated as described in the CCA ensures that we will
- 9 be doing the best that we can.
- 10 You will have many people stand before you
- 11 and speak during this week of hearings. It will
- 12 probably span the spectrum from brilliance to
- 13 gibberish. Fortunately, most of it will be quite
- 14 purposeful. The challenge will be to use a touchstone
- 15 of perspective for each presentation.
- 16 The following is intended to provide such a
- 17 touchstone of perspective. I have organized what I am
- 18 going to say as comments or points that I suggest you
- 19 might be able to use in your decision process.
- 20 Point No. 1: Each of us in this room, you
- 21 and I, and as all creatures before us and to follow us
- 22 until the end of time, are born into and live
- 23 in a nuclear environment. If you run into anyone who
- 24 thinks that is not evident, just ask them to walk
- 25 outside some night and look up at the star-filled sky.

- 1 Every star you see, and billions that you cannot,
- 2 represent an extremely large thermonuclear reaction
- 3 with all of the radioactive consequences.
- 4 I suggest this to provide a perspective for
- 5 determining a value for the antinuclear sentiment.
- 6 Point 2: You, the EPA, have provided for
- 7 and accommodated extensive public involvement. Your
- 8 action in this regard is beyond what is required, and
- 9 the positive aspects of it are without precedent. Most
- 10 hearings are held only in the affected community, which
- 11 in this case would be only Carlsbad. You have tripled
- 12 your efforts in this regard. I commend you for that
- 13 and offer this note to those who want more public
- 14 involvement.
- 15 Point 3: The transuranic waste to be
- 16 disposed of in WIPP is as it will be determined through
- 17 a rigorous characterization and certification process.
- 18 As compared to the billions of pounds of hazardous
- 19 materials driven in trucks through our communities in
- 20 which each of us live, and flown overhead in planes
- 21 everyday again and again, the TRU waste is miniscule
- 22 and insignificant to our daily lives.
- 23 I offer this as a perspective of those who
- 24 challenge the safety of the transportation system.
- 25 The standards imposed by the EPA in 40 CFR

- 1 191 and the process determined in 40 CFR 194 compose a
- 2 margin of safety and conservatism that is
- 3 extraordinary. It is far beyond any similar standards
- 4 for any other repository planned throughout the world.
- 5 Point No. 5: The adherence to the Compliance
- 6 Application Guidance, the meeting of the requirements
- 7 of the Land Withdrawal Act, the Performance Assessment
- 8 Verification Testing, all of these as requested for the
- 9 WIPP project by the EPA, are also very conservative and
- 10 establish a level of confidence far beyond any
- 11 precedent.
- 12 Point No. 6: The WIPP level of quality
- 13 assurance, and the standard of excellence in operation,
- 14 as Mr. Epstein noted before me, have been substantiated
- 15 as both appropriate and correct. This substantiation
- 16 includes numerous peer reviews by both U.S. and
- 17 international experts, and it also has been recognized,
- 18 through a long list of safety and quality awards,
- 19 including such things as compliance with ISO 14000, the
- 20 Voluntary Protection Program, Mine Operator of the Year
- 21 award, Mine Rescue Team awards, and others that I am
- 22 sure you will be told about during this week.
- 23 Point 7: The EPA has already evaluated and
- 24 determined the appropriateness of the DOE site
- 25 certification process in its valuation of the Los

- 1 Alamos Laboratory program.
- 2 Point No. 8: The degree of conservatism and
- 3 safety margin for the development of the results in the
- 4 CCA clearly document the more-than-acceptable operation
- 5 of WIPP.
- 6 Point No. 9: The WIPP neighbors, the mining,
- 7 oil and gas industry, have participated and
- 8 cooperated with these efforts to secure certification.
- 9 They have a clear and mutual interest in the safety and
- 10 security of the region. They have shared their
- 11 knowledge, and DOE is aware of drilling practices used
- 12 in the region. I offer this to provide a perspective to
- 13 what you might hear on the fluid injection and air
- 14 drilling in the region. Neither is an issue.
- During the past quarter of a century, we as a
- 16 nation have been engaged in this process that is near
- 17 its culmination with these public hearings. The purpose
- 18 of this process is to decide how to take a step towards
- 19 the remediation of a national problem. The problem is
- 20 the proximate existence in our biosphere of TRU waste.
- 21 For those who want to, both the proponents and the
- 22 opponents of WIPP, the scientific facts associated with
- 23 TRU waste are well known. Simply stated, there are
- 24 neither technical or scientific issues that in an
- 25 honest perspective deserve further debate.

1 In the 100,000 plus-page CCA that the EPA has

- 2 reviewed, you have more science and discussion of it
- 3 than you probably ever wanted to need to review. You
- 4 have determined in your draft rule that that CCA
- 5 describes the what and how about the opening and safe
- 6 operation of WIPP, and it does so in a manner that is
- 7 fully responsive and compliant with the regulations
- 8 promulgated by the EPA.
- 9 From this nearly quarter of a century
- 10 involving every aspect of the world's best analysis,
- 11 review, design, re-review, re-review, and re-review, we
- 12 are now poised to make a decision to finalize the EPA
- 13 draft rule. That decision will be a powerful action to
- 14 solve the problem called TRU waste. This TRU waste is
- 15 sitting in near proximity to the lives of tens of
- 16 millions of people.
- 17 The EPA review of the CCA has been both
- 18 thorough and extensive. The requirements imposed have
- 19 established a degree of safety far in excess of any
- 20 reasonable degree of expectation. In your draft rule
- 21 the EPA concurs that the Waste Isolation Pilot Plant is
- 22 in compliance with the regulations promulgated. You
- 23 have determined that we as a nation can take a
- 24 life-impacting and beneficial step toward removing the
- 25 TRU waste from the biosphere of tens of millions of

- 1 people.
- 2 I personally appreciate your integrity and
- 3 discipline and that the EPA simply continues to examine
- 4 the facts and to do so in a valid perspective.
- 5 However, as these hearings continue, I am disappointed
- 6 to need to expect from the opponents impassioned pleas,
- 7 based on negative logic, where they request that if you
- 8 can only prove that nothing bad will ever happen.
- 9 As all of you probably know from painful
- 10 experience, that is a brilliant ploy of the
- 11 anti-everything, because you cannot prove the
- 12 nonoccurrence of anything. I am asking that you
- 13 continue to act upon your examination of the facts. In
- 14 perspective, listen and ask: Is this the right thing
- 15 to do, and does this represent what is best at
- 16 this time in our history? If you do that, then the EPA
- 17 will be able to adhere to its right and best decision
- 18 and to make your draft rule final and allow the WIPP to
- 19 open.
- Thank you very much.
- 21 MR. WILSON: Thank you very much for coming
- 22 and for your testimony.
- MR. WILSON: Next is Chuck Wiggins.
- Is he here?
- 25 Did either Dr. Anderson or Phil Carroll come?

- 1 How about Mike Simpson? Is he here?
- 2 (Note: No response.)
- 3 Looks like it's a good time to take a break.
- 4 We are quite a bit ahead of schedule, I guess.
- We are half an hour ahead of schedule, so why
- 6 don't we take -- It's 10 of 10:00. Why don't we take a
- 7 15-minute break, and we will come back.
- 8 Thank you.
- 9 (Note: A recess was taken at 9:50 a.m.)
- 10 MR. WILSON: Okay. We can get started again.
- 11 I understand Dr. Anderson is here.
- DR. ANDERSON: Yes.
- 13 THE COURT: Please come forward. Good
- 14 morning.
- DR. ANDERSON: Good morning. I'm Rip Anderson
- 16 from Sandia, Albuquerque, New Mexico, and I'd like to
- 17 spend a minute or two giving my impressions of the
- 18 position that EPA should take.
- 19 MR. WILSON: Okay.
- DR. ANDERSON: First, the very obvious
- 21 conclusion of the proposed rule is that EPA has made
- 22 the correct decision. In case anyone is worried about
- 23 what the decision is, the decision is to open the WIPP
- 24 and to get on with the business of solving the DOE
- 25 military nuclear waste problem in a reasonable and

- 1 cost-effective manner.
- 2 The evidence for safe disposal of the
- 3 contact-handled TRU military waste in bedded salts in
- 4 Southern New Mexico is overwhelming. The evidence
- 5 comes from the following: A detailed understanding of
- 6 the very stable geologic formations; the complete
- 7 understanding of a hydrology and hydrologic transport
- 8 of any radionuclides, both at the site and within the
- 9 region; the development of shaft seals that are highly
- 10 conservative; the detailed understanding of the complex
- 11 chemistry within the room; exhaustive probabilistic
- 12 performance analysis completed and reported in the
- 13 Compliance Application, and the complete system of
- 14 Quality Assurance.
- The above components allow all of the work to
- 16 be traceable, reproducible, and of a demonstrated high
- 17 quality.
- 18 The research on the WIPP site began with an
- 19 exhaustive development and study of all the features,
- 20 events, or processes that could possibly occur at WIPP,
- 21 then through research the elimination of those that
- 22 cannot occur at the site -- like Sunamis. The
- 23 remaining features, events, and processes are included
- 24 in the final set of calculations.
- 25 On top of features, events, or processes,

1 parameter distributions were generated through detailed

- 2 lab and field experiments. In addition, when
- 3 parameters are needed that could not be measured, such
- 4 as what humans might want or need in the future, or
- 5 what will the environmental conditions be 10,000 years
- 6 in the future, conservative estimates were used. This
- 7 use of parameters, distributions, and conservative
- 8 assumptions, produces estimates of total
- 9 releases from the disposal systems that are bounding;
- 10 that is, the redistributed releases, if any, are larger
- 11 than those that could be expected.
- 12 The motivation for conducting a probabilistic
- 13 performance assessment is to evaluate the effects of
- 14 uncertainty in parameters and conceptual models.
- 15 Athough the inclusion of uncertainties in performance
- 16 assessment calculation is inescapable, using
- 17 distribution functions rather than fixed values allow
- 18 the performance assessment to include the uncertainty
- 19 within the calculations.
- 20 The information obtained in the past 23 years
- 21 of field and laboratory research for the WIPP program
- 22 and the many detailed probabilistic calculations
- 23 leading to the final two highly detailed probabilistic
- 24 calculations, one for the Compliance Certification, and
- 25 a second, using parameters specified by EPA, have shown

1 how robust and safe the WIPP program and repository

- 2 really is.
- 3 So again, the very clear conclusion of this
- 4 hearing is that the WIPP repository is safe, and that
- 5 disposal should begin as soon as possible.
- 6 Thank you.
- 7 MR. WILSON: Thank you, Dr. Anderson.
- 8 I also understand Phil Carroll is now here.
- 9 Good morning.
- 10 MR. CARROLL; Good morning. I'm Phil Carroll.
- 11 I'm the president of the Carlsbad Chamber of Commerce,
- 12 and also own a Buick dealership here in Carlsbad.
- 13 As president of the Chamber, I'd like to say
- 14 that the businesses of Carlsbad fully support the
- 15 opening of the WIPP as early as possible. I would also
- 16 like to say as a family person I have three children
- 17 that live here and three grandchildren that live here,
- 18 and we fully support this. We feel this project is a
- 19 totally safe project. We feel it's been ready to be
- 20 opened for possibly as long as three years; however,
- 21 due to the new and furthering of testing to make sure
- 22 everything is done at this point, that I think we
- 23 probably perhaps have done some overkill, and I think
- 24 it's time for us to go ahead and get this open.
- 25 As far as the studies that have been done, I

1 think they have been exhaustive; I think they have been

- 2 very complex. I think that everything that's been done
- 3 by EPA, DOE, Westinghouse has proven that this is a
- 4 safe and viable solution to storage of transuranic
- 5 waste.
- 6 Thank you for coming. Thank you for your
- 7 support, and good day.
- 8 MR. WILSON: Thank you very much for coming
- 9 today and testifying before us.
- 10 MR. WILSON: Chuck Wiggins. Good morning.
- 11 MR. WIGGINS: Good morning.
- 12 I'm City Councilman Chuck Wiggins, and I'm
- 13 here this morning to speak in support of WIPP.
- 14 Those of us that have taken the time over the
- 15 past few years to educate ourselves about WIPP believe
- 16 that it's safe and the only viable alternative to the
- 17 continued stockpiling of transuranic waste around the
- 18 country. Our best scientific minds have said so.
- 19 We think it's time to open WIPP, and we thank
- 20 you very much for being here.
- 21 Thank you.
- MR. WILSON: Thank you.
- Is Dee Armstrong here?
- MS. ARMSTRONG: Yes.
- MR. WILSON: Hi.

- 1 MS. ARMSTRONG: Good morning. I guess I'm
- 2 your first protester. I protest the inaction that's
- 3 been taken on WIPP.
- 4 But this isn't a protesting sign.
- 5 My name is Dee Armstrong. In my opinion, as
- 6 a taxpayer and an environmentalist, the major focus of
- 7 these hearings resolves around two words: "Will"
- 8 and "might."
- 9 Picture this. It's December 27, and I was in
- 10 my car in the middle of nowhere between Roswell and
- 11 Vaughn -- and this didn't happen. But I spot a person
- 12 lying on the side of the road in a pool of blood.
- 13 A problem.
- 14 I stop. The person is alive. Logic tells me
- 15 that if I leave this person there, he will surely bleed
- 16 to death.
- I must consider what "might" happen if I
- 18 place this person in my car and drive him to the
- 19 nearest police or hospital. This consideration is a
- 20 responsible one. I must consider what "might" happen.
- 21 If I get his blood on me, I "might" contract
- 22 a blood-transmitted disease such as hepatitis or AIDS,
- 23 or I "might" not.
- I can take measures to minimize these risks.
- 25 If I get a flat tire and I have car trouble,

- 1 then he "might" die anyway.
- 2 But I might not get a flat tire.
- 3 If I leave him where he is, then someone else
- 4 "might" help him. But someone else might not.
- 5 Kind of like the WIPP waste.
- If we leave it where it is, some solution
- 7 "might" come along. But it might not.
- 8 I see your social and scientific
- 9 responsibility as this: Consider, please, both what
- 10 "will" happen if the waste is left where it is
- 11 currently stored, and what "might" happen in the next
- 12 10,000 years if we dispose of it at WIPP.
- 13 Consider what measures have been incorporated
- 14 to minimize risks of what "might" happen.
- I also want you to place your heaviest
- 16 consideration on the consequences of what "will" happen
- 17 and treat the "might" scenarios in perspective.
- 18 It's "will" versus "might."
- 19 And in Albuquerque and Santa Fe you are going
- 20 to see and hear much emotional testimony. Please don't
- 21 let the theatrics of emotions at these hearings distort
- 22 the importance of sound science, common sense, and
- 23 obvious logic.
- I'm an environmentalists, and WIPP is the
- 25 environmentally responsible project that will most

- 1 definitely help clean up the DOE weapons complex.
- 2 Yes, it might present risks in the far future, but it
- 3 has responsibly considered those risks and incorporated
- 4 processes to minimize those risks.
- 5 It's "will" versus "might." And while the
- 6 silent majority is busy earning a paycheck, it's
- 7 counting on you to prevent what "will" happen if the
- 8 waste remains where it is, and to minimize what "might"
- 9 happen in the next 10,000 years.
- 10 It's time we got what we paid for as
- 11 taxpayers: A nuclear waste repository for the
- 12 environmental good health of our nation's people and
- 13 our environment. WIPP is a well-regulated solution to
- 14 the national transuranic waste program. It is a
- 15 fishbowl scrutinized by scientists around the globe.
- 16 Please keep the "will" and the "might" in perspective.
- 17 Please keep the science and the sensationalism clearly
- 18 separate. And please keep in mind that in most cases
- 19 New Mexicans are proud of hosting this world-class
- 20 facility and being a part of the solution and not the
- 21 problem. Please issue your final Certificate of
- 22 Compliance for WIPP in a timely manner.
- Thank you.
- 24 MR. WILSON: Okay. Thank you very much for
- 25 coming, and thanks for all the time you obviously put

- 1 in.
- Is Mike Simpson here? Mike, please come up.
- 3 Good morning.
- 4 MR. SIMPSON: Good morning.
- 5 The information and opinions I would like to
- 6 present today are based on my working experience and
- 7 knowledge in my subject area. I'm the Quality
- 8 Assurance Manager at the Technical Assistance
- 9 Contractor to the DOE's CAO office, and I supervise a
- 10 staff of about 20 QA professionals with vast experience
- 11 in both the nuclear power industry and the DOE complex.
- 12 Personally, I've been at sites such as Hanford, Los
- 13 Alamos, Lawrence Livermore, also DOE headquarters.
- 14 And I'd like to make the following points for
- 15 the record in support of my belief that EPA and the
- 16 American people can be confident that the controls
- 17 employed for WIPP to assure quality are appropriate
- 18 and sufficiently rigorous and demanding.
- 19 The QA practices employed in support of the
- 20 Compliance Certification Application were stringent,
- 21 thorough, and exceeded any yet applied to a repository,
- 22 including UMTRA, RCRA, CERCLA, Superfund,
- 23 and Low-level Radioactive. These practices are also
- 24 equivalent to or exceed those QA programs implemented
- 25 by the WIPP participant organizations in other aspects

- 1 of their operation. DOE controls are being
- 2 implemented in a much stricter fashion for this project
- 3 than they are in most parts of the complex.
- 4 The thoroughness of DOE's data qualification
- 5 process for WIPP ensures that only high quality
- 6 scientific data were used for the Performance
- 7 Assessment and Compliance Certification Application.
- 8 By "high quality" I mean data that were qualified for
- 9 use by being generated under the controls of an ASME
- 10 NQA-1, -2 and -3 program -- that is the American
- 11 Society of Mechanical Engineers -- or otherwise
- 12 qualified using two of the four methods specified by 40
- 13 CPR Part 194, those being peer review and independent
- 14 review teams. Both methods utilized highly qualified
- 15 technical experts who were completely independent of
- 16 the work being examined. Only qualified data were
- 17 used.
- 18 DOE's QA program for WIPP ensures that
- 19 participants are in full compliance with QA
- 20 requirements through an aggressive assessment program.
- 21 In preparation for the CCA, DOE conducted extensive
- 22 assessments of the WIPP participants to ensure they met
- 23 the QA requirements of 40 CFR 194 and NQA-1, -2 and -3.
- 24 In addition to data quality requirements, NQA criteria
- 25 include, for example: controls on documents records;

- 1 personnel qualification and training; design;
- 2 procedures and drawings; nonconforming items; software;
- 3 procurement; tests and inspections. And the list goes
- 4 on.
- 5 All participant organizations undergo
- 6 constant DOE assessment, as well as assessment from
- 7 independent organizations and international programs.
- 8 DOE assessments of WIPP include various types
- 9 of evaluations designed to determine the adequacy,
- 10 implementation, and effectiveness of participants'
- 11 programs. Adequacy in this sense means appropriate
- 12 flow-down of upper-tier requirements into implementing
- 13 procedures. "Implementation" is the term for the
- 14 performance of the activities required by those
- 15 procedures, and "effectiveness" is the determination of
- 16 the quality and usefulness of the end product.
- 17 All assessments include review of program
- 18 documentation, witness of in-process practices, and
- 19 extensive tracking and follow-up of identified program
- 20 deficiencies, and corrective action.
- 21 Assessments are conducted by highly qualified
- 22 and formally certified QA and technical personnel that
- 23 maintain strict independence from the work they assess.
- 24 In conclusion, I would reiterate that the EPA
- 25 should be secure in the knowledge that the QA controls

1 instituted on WIPP are strict and rigorous to a degree

- 2 that demonstrates the suitability of the physical site
- 3 and the transportation methods that will be used to
- 4 isolate DOE's transuranic waste.
- 5 Thank you.
- 6 MR. WILSON: Thank you very much.
- 7 Is Senator Kidd here yet?
- 8 Is there anybody else here who would like to
- 9 testify and hasn't signed up, or hasn't had a chance to
- 10 yet?
- I think we will then take a break until other
- 12 witnesses -- we are again a fair amount ahead of
- 13 schedule, so we will just take a break and holler
- 14 whenever other people come who are scheduled to testify
- 15 this morning.
- I should add that for those of you here, it
- 17 looks like after the lunch break, we have, oh, one,
- 18 two, three, or four additional folks who are coming to
- 19 testify, and we will probably finish earlier than 4:00
- 20 o'clock. Probably more like -- we will start up again
- 21 around 2:00 and probably finish by 3:00, or a little
- 22 sooner, depending on who comes.
- 23 So if any of you are planning to be here, you
- 24 can know that, or if you know of others who are
- 25 planning to come this afternoon, you might let them

1 know that probably coming early will be better than

- 2 coming late.
- 3 So thank you. And we will holler as soon as
- 4 there's some folks who want to testify.
- We will take a break.
- 6 (Note: A recess was taken at 11:37 a.m. and
- 7 proceedings resumed at 11:50 a.m.)
- 8 MR. WILSON: Okay. The next witness today
- 9 is Senator Kidd.
- 10 Senator, welcome. Good morning.
- 11 SENATOR KIDD: Thank you very much. And good
- 12 morning.
- 13 My name is Don Kidd. I'm the New Mexico
- 14 State Senator who represents District 34, which
- 15 includes Eddy, Lea, and Otero counties. As we all
- 16 know, Eddy County is the host community of the Waste
- 17 Isolation Pilot Project.
- 18 We are here today to say it would be -- and I
- 19 believe this very much -- to say it would be very hard
- 20 to find a community in the United States that has a
- 21 better understanding of WIPP. Our mining experience
- 22 goes back to almost the first settlers in this area,
- 23 and continues today with the benefits of the most
- 24 advanced engineering and geology I believe that is
- 25 available in the nation. The WIPP geology and mine

1 engineering is fully understood and accepted in our

- 2 district.
- 3 The energy business prospers in Southern New
- 4 Mexico, in large part because we understand and accept
- 5 the environmental responsibility that is associated
- 6 with energy, whether it's oil or nuclear.
- 7 I believe Eddy County and its neighbors lead
- 8 the nation with environmental responsibility, and the
- 9 Environmental Protection Agency in its decision-making
- 10 progress on the WIPP should not take my community's
- 11 understanding and its willingness to accept a major
- 12 portion of the nation's nuclear clean-up responsibility
- 13 lightly.
- 14 It is indeed a pleasure and an honor to be
- 15 here with you today. The EPA has proven itself time
- 16 and time again worthy and capable. Your review of the
- 17 Compliance Certification Application prepared by the
- 18 Carlsbad area office and Westinghouse and submitted to
- 19 the U.S. Department of Energy for your decision, has
- 20 been cautious and deliberate. The willingness of the
- 21 EPA to set the process above reproach is noteworthy,
- 22 and the people from EPA who worked on this review will
- 23 be benchmarked for many, many years to come. You will
- 24 be the ones that break the nuclear deadlock.
- 25 Ahead, the EPA must make a determination,

- 1 based on fact and hopefully not fiction, a decision
- 2 based on science and not politics, a decision whose, I
- 3 feel, time has come, and I personally would urge the
- 4 agency to speedily forward a favorable record of the
- 5 decision to the Secretary of Energy.
- 6 I think you'll find the people in our area
- 7 feel the site is ready and would like to move ahead.
- 8 However, the basic decision before us today is: Does
- 9 the WIPP comply with the Radiation Disposal Standards
- 10 defined in 40 CFR 194? And I believe the answer is a
- 11 resounding yes.
- 12 I would like to point out to you and request
- 13 that you include the following conclusions issued by
- 14 the independent scientific and regulatory experts who
- 15 have reviewed the WIPP parallel to the EPA. In
- 16 summary, the Nuclear Energy Agency for the Organization
- 17 of Economic Development, in cooperation with the
- 18 International Atomic Energy Agency, undertook a joint
- 19 review of the scientific and engineering soundness of
- 20 the WIPP. They concluded that the information
- 21 presented in the Compliance Certification Application
- 22 that is before us today is appropriate and in the
- 23 context of the EPA's requirements. The analysis in the
- 24 CCA is based on appropriate studies and is technically
- 25 sound, and the method used to assess the performance of

1 the WIPP is in conformity with the practice used in our

- 2 country. The independent review should be included and,
- 3 I hope, given great weight in your consideration.
- 4 I would like to bring forward to you for the
- 5 record the conclusion issued in the report by the
- 6 National Research Council. They concluded that
- 7 scientific analysis indicated the WIPP repository has
- 8 the ability to isolate transuranic waste for more than
- 9 10,000 years. The National Research Council is the
- 10 principal operating agency of the National Academy of
- 11 Sciences. The National Academy of Engineering is a
- 12 private non-profit institution that provides science
- 13 and technology advice under Congressional charter.
- In closing, I would like to paraphrase
- 15 journalist Bernard Cohen. He said: The worst sin in
- 16 discussing nuclear issues is to put risk in
- 17 perspective. People can only understand risk by
- 18 comparing it to known risk.
- 19 For example, the risk to the average American
- 20 from nuclear power is equivalent to smoking one
- 21 cigarette every 10 weeks; to an overweight person,
- 22 increasing his weight by 300ths of an ounce; to
- 23 crossing the street one extra time every 20 weeks;
- 24 increasing the national speed limit from 55 miles an
- 25 hour to 55.02 per hour.

1 The Waste Isolation Plant will dispose of

- 2 plutonium-contaminated solid waste. WIPP is the
- 3 ultimate safe disposal site. As you know, it will be
- 4 disposed of a half mile underground in bedded salt
- 5 forever. The WIPP poses no problem; however, the
- 6 inflammatory language you hear on this subject is
- 7 totally misleading, in my judgment. You hear about
- 8 deadly radiation, lethal radioactivity; you hear about
- 9 plutonium, the most toxic radioactive element known.
- 10 We never read about deadly automobiles or
- 11 lethal electricity, although 1200 Americans die of
- 12 electrocution each year, or how lethal water is,
- 13 referring to 8,000 drownings per year, or deadly falls,
- 14 which kill 15,000 people a year.
- 15 My point is: The risk associated with the
- 16 Waste Isolation Pilot Plant is low and fully acceptable
- 17 when it's understood. The communities of Eddy, Lea and
- 18 Otero, understand the risk and accept the
- 19 responsibility. I urge you, as the leading regulatory
- 20 agency in the country, to accept on their merits the
- 21 validated science, engineering, and facilities that
- 22 support the Waste Isolation Plant, and grant a
- 23 favorable decision, not only for our community but for
- 24 the nation.
- 25 Thank you all very much for allowing me to be

- 1 here.
- 2 MR. WILSON: Senator, thank you for coming
- 3 today. We really appreciate your testimony.
- 4 Is there anybody else here who wants to
- 5 testify and hasn't had a chance? If not, we will break
- 6 for lunch. We'll be back at 2:00 o'clock, as I
- 7 mentioned earlier. We have about three people on for
- 8 this afternoon around 2:00, and we'll see you all then.
- 9 Thanks.
- 10 (Note: Lunch recess taken at 11:45 a.m.,
- and proceedings resumed at 2:00 p.m.)
- 12 MR. WILSON: Ready? Okay.
- I think we got through everybody this
- 14 morning, so Tim Sweeney is first, and right up front.
- 15 MR. SWEENEY: Good afternoon. My name is
- 16 Tim Sweeney. I'm the transportation manager for the
- 17 Carlsbad Area Office. And yes, I did choose this time,
- 18 after lunch on purpose. I think the discussions of
- 19 comparative risks would be ones you can understand if
- 20 you went to Canal Street and ate at one of the places
- 21 where the menu is on the wall, not in your hands.
- 22 Although your draft decision does not involve
- 23 the transportation system that will be used by WIPP,
- 24 opponents of this project will stand before you this
- 25 week and tell you what a menace it is. They will tell

1 you how countless thousands of people will be at risk.

- 2 They will tell you about the leaking containers found
- 3 in shipments from Fernald to Nevada three weeks ago, as
- 4 an example of the dangers of shipment.
- 5 They won't tell you those leaks are such low
- 6 level to be considered background. They won't tell you
- 7 there were no injuries. They won't tell you those
- 8 shipments have as much to do with WIPP shipments as a
- 9 pizza delivery.
- Some people say they do this because they
- 11 lack the intellectual capacity to grasp the complex
- 12 science that goes into the certification process;
- 13 others argue that they bring it up because they believe
- 14 that it is the easiest way to manipulate the opinions
- 15 of citizens by using fearmongering, hysteria, and, as
- 16 you will see, personal attacks.
- 17 Regardless of their selfserving motives, they
- 18 have never provided you the truth about the safest
- 19 transportation system in the world.
- To support the WIPP mission, the DOE requires
- 21 a system that would meet regulatory requirements and
- 22 address the issues and concerns of the various
- 23 stakeholders. The transportation system is designed to
- 24 transport approximately 38,000 shipments of TRU waste
- 25 over a 35-year period in a safe manner. The system

- 1 must also meet or exceed all safety requirements.
- 2 To achieve this objective, DOE also worked
- 3 closely with our stakeholders to identify their
- 4 concerns on the transport of radioactive material.
- 5 Using the various inputs, the DOE built a
- 6 transportation system that has set standards for the
- 7 transportation industry. The system incorporates an
- 8 integrated equipment design, highly qualified drivers,
- 9 training of emergency response personnel, and testing
- 10 and evaluation of both equipment and personnel.
- 11 With up to 38,000 shipments scheduled, it is
- 12 probabilistic that some shipments will be involved in
- 13 accidents. The consequences associated with an
- 14 incident depend on various factors, including, of
- 15 course, the severity of the accident forces, the type
- 16 of packaging being used, weather conditions, time of
- 17 day, emergency response personnel response time, and
- 18 their level of training.
- I want to briefly address those factors.
- 20 Over 90 percent of the routes used by WIPP
- 21 will be on the safest roads in the country: U.S.
- 22 Interstates. By avoiding locations that could result
- 23 in head-on collisions, the system significantly reduces
- 24 the physical impact forces possible in the case of an
- 25 accident.

1 By requiring each tractor to have two fully

- 2 qualified drivers, the system reduces driver fatigue,
- 3 which reduces the possibility of an accident occurring
- 4 at all, since that is the leading indication of
- 5 commercial accidents.
- 6 Inclement weather also creates hazardous
- 7 travel conditions. DOE is smart enough to know it
- 8 snows in Colorado and it snows in Idaho. We will
- 9 optimize our schedules and, during the winter months,
- 10 minimize the use of those sites and ship from southern
- 11 sites.
- 12 Additionally, the weather is monitored 24
- 13 hours a day, and reports are available to drivers at
- 14 any time or location. Current weather conditions, the
- 15 weather forecast, and road conditions must be
- 16 acceptable prior to the dispatch of any WIPP shipment.
- 17 The time of day is a major player, also. To
- 18 minimize undue risk, WIPP shipments will attempt to
- 19 avoid travel during peak traffic hours; i.e., avoid
- 20 rush hours. We have made agreements with certain towns
- 21 and cities to do just that.
- Response time to emergency is also critical.
- 23 Our shipments are monitored by a satellite system
- 24 designed to provide tracking and communications for DOE
- 25 shipments of radioactive materials. Each state

1 impacted by the WIPP is provided funding and training

- 2 for monitoring shipments within their jurisdiction.
- 3 This PC-based system can monitor the transport and can
- 4 pin-point the location of the truck within 1,000 feet.
- 5 Additionally, these jurisdictions are
- 6 provided a detailed eight-week schedule, updated
- 7 monthly, of all shipments. This allows the responders
- 8 to be aware of the time window that the shipment will
- 9 pass through their area. Additionally, each tractor is
- 10 equipped with a CB radio, a cellular phone, and a
- 11 satellite phone that would allow the drivers to notify
- 12 response agencies in case an accident occurs.
- To address the knowledge and experience level
- 14 of the emergency response teams along the route to the
- 15 WIPP site, the DOE agreed to provide training to the
- 16 state and tribal first responders. The program
- 17 provides training in emergency response actions,
- 18 hazardous constituents, the incident command system,
- 19 incident mitigation, and medical management. This is
- 20 the only OSHA certified training in the world.
- In conclusion, in today's transportation
- 22 world, there are many hazards. At any given time one
- 23 can be in close proximity to them. Many of these
- 24 products we use every day and disregard their
- 25 potential consequences. The fact is there have been

1 over one million shipments of radioactive materials in

- 2 this country, both DOE and commercial, without a single
- 3 radiological fatality.
- 4 Even with a perfect record, we have gone to
- 5 extremes to make the system even safer. This is why
- 6 the National Academy of Sciences proclaimed that the
- 7 system proposed for transportation of TRU waste to the
- 8 WIPP is safer than that employed for any other
- 9 hazardous material in the U.S. today. To put this in
- 10 the final perspective, you, the panel, have a higher
- 11 probability of having a fatality during your trip out
- 12 to Carlsbad, Santa Fe, and Albuquerque than being
- 13 involved in 20 years of WIPP shipments.
- 14 Thank you.
- 15 MR. WILSON: Thank you very much. I gather
- 16 you are not using Mesa Airlines to carry any...
- 17 Sorry about that.
- 18 The next person I have on the list is
- 19 Donovan Mager. Is he here?
- 20 (Note: No response.)
- 21 No.
- 22 We had a couple of people who came in --
- 23 Gosh, I can't read that.
- Jimmy Mc?
- MR. McWHINNEY: Good afternoon.

- 1 M-c-W-h-i-n-n-e-y.
- I am not used to making presentations where
- 3 I read things verbatim, but I do want to do that today
- 4 because I want the wording as it appears on the page.
- 5 Two articles were recently published in the
- 6 Carlsbad Current and the Albuquerque Journal regarding
- 7 the issue of air drilling into the WIPP. Content for
- 8 these articles was apparently derived from a letter
- 9 sent to the EPA by the New Mexico Attorney General's
- 10 office. Attached to that letter was a technical report
- 11 ostensibly containing an evaluation of the feasibility
- 12 of air drilling into WIPP, and a quantitative
- 13 assessment of the impact of such an event, should it
- 14 occur. However, the news article omitted information
- 15 which, if included, would have led to the conclusion
- 16 that air drilling was correctly excluded from the WIPP
- 17 Compliance Certification Application, and that the
- 18 calculations presented in Dr. Bredehoeft's report were
- 19 without scientific basis.
- In the proposed ruling published in October
- 21 of '97, EPA states that the WIPP complies with the
- 22 applicable disposal regulations. Issuance of this
- 23 proposed ruling concluded a lengthy public review,
- 24 including a detailed assessment of the WIPP performance
- 25 relative to the applicable regulatory requirements.

- 1 Scientific studies leading to the conclusion of
- 2 compliance with these standards were also critically
- 3 reviewed by the National Academy of Science and other
- 4 groups. Since the WIPP is located in a region of
- 5 productive natural resources, specific regulations were
- 6 set forth to ensure that any future resource
- 7 development was appropriately included in the CCA.
- 8 Inherent in these regulations are the conservative
- 9 assumptions that exploration and drilling for these
- 10 resources -- I'm about to knock that over -- will
- 11 continue at today's pace and technological level, and
- 12 all institutional memory of WIPP will be lost.
- In this published review of WIPP, the
- 14 National Academy of Sciences recommended that, quote,
- 15 "Speculative scenarios of human intrusion should not be
- 16 used as the sole basis or primary basis on which to
- 17 judge the acceptability of WIPP."
- 18 An appropriate quantitative assessment of
- 19 future drilling intrusions is included in the CCA to
- 20 ensure the safety of the site for future generations.
- 21 The inclusion of speculative scenarios of the type
- 22 proposed by the Attorney General's office regarding air
- 23 drilling are justifiably excluded. Overwhelming
- 24 evidence, discussed by Ross Kirkes last night, by the
- 25 way, demonstrates that air drilling is not the current

- 1 practice in the WIPP vicinity. To further public
- 2 confidence in the safety of WIPP, it will also be shown
- 3 that the potential impact of air drilling into WIPP was
- 4 grossly misrepresented by the Attorney General's
- 5 office.
- 6 Is the yellow light really on?
- 7 MR. WILSON: Yeah. You got about a minute
- 8 and a half.
- 9 MR. McWHINNEY: Let's just, in that case,
- 10 then, turn to the summary. You have the written text.
- 11 MR. WILSON: Okay.
- 12 MR. McWHINNEY: It is worthy of note, before
- 13 I get to the summary, that the author of the GasOut
- 14 code, the computer code that calculates releases due to
- 15 spallings said it was never intended to be used for the
- 16 purpose for which Dr. Bredehoeft used it, and, in fact,
- 17 the author of that code called it an inappropriate and
- 18 misleading use of the codes.
- 19 In summary, the Attorney General's letter and
- 20 attached analysis are misleading, inappropriate,
- 21 inaccurate, and incomplete. Issues regarding
- 22 environmental regulations have already been carefully
- 23 evaluated by the EPA. The predictive studies and
- 24 scenarios presented in the CCA have received extensive
- 25 review.

1 Then I'll conclude at that point. You have

- 2 the written testimony. We will have additional
- 3 material on this subject available in the comment
- 4 period, hopefully by the end of January.
- 5 MR. WILSON: Okay.
- 6 MR. McWHINNEY: There are plans for studies
- 7 that will not be done because it's related to the
- 8 spalling phenomenon. That work will continue for
- 9 another year or so. But I think we can dismiss the air
- 10 drilling to your satisfaction.
- 11 MR. WILSON: Okay. Thank you. We will
- 12 include your full statement in the record and look
- 13 forward to your further comments later on.
- MR. McWHINNEY: Fine.
- 15 MR. WILSON: Appreciate it. Thank you very
- 16 much.
- 17 MR. WILSON: Next I have Tom Quintela.
- 18 Did I say that right?
- 19 MR. QUINTELA: That's close.
- 20 MR. WILSON: I had a little hard time.
- MR. QUINTELA: I've heard worse.
- MR. WILSON: Hi.
- 23 MR. QUINTELA; Good afternoon. My statement
- 24 will be very short. My name is Tom Quintela,
- 25 Q-u-i-n-t-e-l-a. And don't feel bad about it,

- 1 everybody seems to have problems with it.
- 2 I am the Mayor Pro Tem for the City of
- 3 Carlsbad, and basically I'm here to tell you that for
- 4 many, many years, 20 plus years, our community has been
- 5 very supportive of this project. Our city leaders,
- 6 county leaders, our legislators, our congressmen, we
- 7 have all been in this together for 20-plus years, and
- 8 we feel very strongly today that it's a project that
- 9 has been probed and analyzed by the best scientific
- 10 minds in the world. We feel that it's a safe project,
- 11 and we live here. And we certainly feel it's going to
- 12 be safe for generations to come; otherwise, we
- 13 certainly would not support it.
- But for 20-plus years we have supported it.
- 15 We believe in the safety of the WIPP issues, of the
- 16 WIPP site, and what's going on out there. We are ready
- 17 to become part of the solution for this national
- 18 problem that we have in regards to waste disposal.
- 19 So I think through the years that the City,
- 20 the Department of Energy, our Congressional
- 21 delegations, et cetera, we have all had an excellent
- 22 relationship and have all had the same goal in mind,
- 23 and that's to open the Waste Isolation Pilot Project.
- 24 As I said, we certainly believe in its goal,
- 25 and we certainly feel that WIPP is ready, and that it

- 1 should be opened. And we feel it's met just about
- 2 every requirement that's been thrown at it through the
- 3 years, and I think it's time to quit spending all this
- 4 money and to open the site and let's get on with taking
- 5 care of this national problem that we have.
- 6 Thank you very much.
- 7 MR. WILSON: Thank you very much for taking
- 8 the time to come here.
- 9 Next is Tom Bearden.
- 10 Did I do better on that one?
- 11 MR. BEARDEN: That was great. Thanks.
- Here is copies. I'll stay pretty close to
- 13 this.
- MR. WILSON: Okay. Good. Thank you.
- 15 MR. BEARDEN: Good afternoon. My name is
- 16 Tom Bearden. I live here in Carlsbad, and I work for a
- 17 company called NFT Incorporated, which is a nuclear
- 18 technology company based in Lakewood, Colorado. The
- 19 owner and president of our company, Gil Brazell, will
- 20 be testifying tomorrow afternoon in Albuquerque, so my
- 21 comments are designed to in some ways complement what
- 22 you will hear tomorrow afternoon from Mr. Brazell.
- 23 As a resident of Carlsbad, I want to
- 24 sincerely thank the EPA for choosing to hold these
- 25 opening hearings here in our city. NFT is also part of

1 the Carlsbad Technical Assistance Contractors -- that

- 2 is CTAC for short -- which is a team of companies that
- 3 has been hired by DOE for their expertise in waste
- 4 management and nuclear operations. I provide technical
- 5 assistance primarily in the field of waste
- 6 characterization.
- 7 Just so you know something about my
- 8 background, I'm a chemical engineer with just over 15
- 9 years of industrial experience, and for the last nine
- 10 years I've worked on DOE weapons sites, including
- 11 Hanford, Washington, and Rocky Flats, Colorado.
- 12 You've heard a lot of discussion today and
- 13 last night about the scientific studies that have
- 14 concluded WIPP as an ideal radioactive waste
- 15 repository. I'd like to spend my time discussing the
- 16 characteristics of the waste that will be placed at the
- 17 WIPP, and the detailed measurements that are used to
- 18 ensure all the waste meets our stringent Waste
- 19 Acceptance Criteria.
- 20 Before waste can come to the WIPP, it must
- 21 meet what we call the Waste Acceptance Criteria. Some
- 22 of the examples are that the waste cannot have any
- 23 free liquid in it, no compressed gases, or no
- 24 explosives or corrosive materials.
- 25 These requirements ensure the safety of the

- 1 workers both at the sites and the WIPP. They also
- 2 protect the public and also prevent emplacement of any
- 3 materials that would adversely affect the long-term
- 4 performance of the repository.
- 5 The National Transuranic Program, which is
- 6 part of the DOE based here in Carlsbad, works directly
- 7 with the DOE sites where the waste is stored to make
- 8 sure our requirements are met before the waste is
- 9 shipped. Each container is put through a battery of
- 10 requirements and tests before being certified for
- 11 shipment and disposal. I want to quickly go through
- 12 some of those tests that are done on the waste.
- 13 First we accurately measure the radioactivity
- 14 in every container of the waste, and we use a technique
- 15 called radioassay. For most containers this is done
- 16 without having to open the container. That is a
- 17 non-destructive assay which uses very sensitive
- 18 instruments to measure the radioactivity.
- 19 For example, at one of the sites where I
- 20 worked, at Rocky Flats, they will be using systems
- 21 called calorimeters to measure the decay heat for
- 22 plutonium residue waste, and this will give a very
- 23 accurate assay of the radioactive material and verify
- 24 it meets the waste acceptance criteria.
- 25 Another technique is called radiography.

1 That is just a sophisticated X-ray system. It's used

- 2 to look at the waste. Every container of stored waste
- 3 will be radiographed before shipment to verify its
- 4 physical form and to make doubly sure that none of the
- 5 prohibited items I discussed earlier are present.
- 6 In addition, a limited number of these
- 7 containers will also be opened and visually examined to
- 8 verify the accuracy of the radiography.
- 9 Radiography is an excellent characterization
- 10 method because it provides the data we need without
- 11 unnecessarily exposing workers to radioactive material.
- 12 Finally, all the waste will be sampled before
- 13 it's sent to WIPP for the presence of flammable or
- 14 toxic gases.
- 15 WIPP also requires that the containers be
- 16 vented using specials filters, and then at the same
- 17 time it's vented, generally that's where we also take
- 18 this sample and test for the gas contents.
- 19 My company happens to be a leader in this
- 20 particular technology and Mr. Brazell will talking more
- 21 about that tomorrow afternoon. All I wanted to say
- 22 this afternoon is that by installing these high-tech
- 23 filters on the containers, WIPP can be assured that the
- 24 risk from flammable or toxic gas is negligible.
- 25 I think you can see from this brief overview

- 1 that each container is thoroughly tested. In fact,
- 2 those of us in the transuranic waste management
- 3 business sometimes joke that it's our job to make sure
- 4 that only "reagent grade" waste ever makes it to WIPP.
- 5 Actually, there is some truth in this lame attempt at
- 6 humor, because if you work in the nuclear industry you
- 7 find out, with the possible exception of spent nuclear
- 8 fuel, transuranic waste is probably the most well
- 9 characterized waste material on earth.
- 10 So I urge the EPA to carefully review the
- 11 DOE's waste characterization program. I am confident
- 12 when you do so, you will agree with me that it is
- 13 entirely adequate to the task.
- I also urge you to promptly approve the
- 15 shipment and disposal of waste to WIPP.
- 16 Thank you.
- 17 MR. WILSON: Thank you very much.
- 18 Next we have Michael Kearney.
- 19 MR. KEARNEY: Good afternoon. My name is
- 20 Mike Kearney. I'm the former chief of the regulatory
- 21 branch of the U. S. Nuclear Regulatory Commission
- 22 Division of Low-level Waste Management and
- 23 Decommissioning. In that position I helped manage and
- 24 develop the Commission's rules and rulemakings for
- 25 uranium mill tailings, low-level waste, and financial

1 assurances for decommissioning. All our rules for the

- 2 protection of the public health and safety were
- 3 stringent and they were well based. My review of this
- 4 proposed rule shows that it, too, is similarly
- 5 stringent and well based, and I commend you for an
- 6 excellent job that you have done in evaluating the
- 7 enormous amount of information presented and drawing
- 8 the timely and firmly based conclusions that you have.
- 9 Where there are legitimate concerns raised in
- 10 rulemakings, they must, of course, be given due
- 11 consideration and be resolved. Where there are
- 12 other agendas masquerading as legitimate concerns,
- 13 they must be recognized as such and treated
- 14 appropriately.
- 15 The rules promulgated by both the EPA and
- 16 the NRC have, over time, proven to be able to be
- 17 implemented, and they have proven to be effective.
- 18 Both agencies have kept their eye on making sure that
- 19 an excellent basis for their regulations has been
- 20 developed and that guidance is provided to let the
- 21 regulated communities know what successful compliance
- 22 look like. That oftentime requires excellent
- 23 communication between the regulator and those regulated
- 24 to feed back the practical implementing aspects of
- 25 regulations.

- 1 I'm glad to see that such a communication
- 2 channel has been provided for in the implementation of
- 3 this rule through the recertification of WIPP every
- 4 five years.
- 5 Sometimes these implementing difficulties can
- 6 be seen coming and headed off while the rule is still
- 7 in the proposed stage. One such difficulty is the new
- 8 requirement for EPA to certify each of some 570 waste
- 9 streams that are destined for disposal at WIPP, and
- 10 which introduce a 30-day comment period prior to the
- 11 certification of each waste stream.
- 12 This appears to have grown out of the
- 13 original 40 CFR 194, a rule that was developed to
- 14 regulate the disposal of TRU waste, not the
- 15 certification of wastes and the sites that generated
- 16 them.
- 17 At DOE Carlsbad Area Office waste and site
- 18 certification requirements and processes are very
- 19 thorough. Their process provides full visibility to
- 20 the EPA and the State of New Mexico and others of all
- 21 information involved with their decisions to approve
- 22 sites to ship waste to WIPP. EPA conducting a separate
- 23 and lengthy process to achieve the same end
- 24 adds no real value. It will be very expensive. The
- 25 language in the proposed rule addressing the separate

- 1 EPA process for certification of waste streams,
- 2 Condition 3, should be stricken.
- 3 In all other respects I fully endorse the
- 4 proposed rule and commend EPA for its thorough review
- 5 of DOE's Certification Application.
- 6 Thank you for this opportunity. The work
- 7 you're doing here is both important and urgent, and
- 8 deserves to be done well. You have done so. It is now
- 9 time to open and bring waste to WIPP.
- 10 MR. WILSON: Thank you very much for coming
- 11 today.
- 12 Is Donovan Mager here now?
- We're a little bit a head of schedule. We
- 14 have two other people yet to testify, Mr. Mager being
- 15 next. Maybe we'll take about a 10-minute break here
- 16 and see if he shows up, and start up the hearings
- 17 again.
- 18 Thanks. Take a 10-minute break.
- 19 (Note: A short recess was taken.)
- 20 MR. WILSON: If people will take their
- 21 seats, let's continue. We just got the word on Donovan
- 22 Mager's testimony. He is not going to be here.
- 23 (Note: Written testimony of Donovan Mager
- 24 submitted and included herein in lieu of oral
- 25 testimony.)

1 MR. WILSON: Roger has the honor of being

- 2 the last witness. Is there anybody else would like to
- 3 testify but hasn't had a chance?
- 4 (Note: No response.)
- 5 Roger, you're last but not least.
- 6 MR. NELSON: Good. I planned it that way.
- 7 First of all let me congratulate you on your
- 8 upcoming challenge to become immortal.
- 9 MR. WILSON: That is a challenge.
- 10 MR. NELSON: Your names will be associated
- 11 with the world's first deep geologic waste repository,
- 12 and the associated opening of the WIPP as a regulated
- 13 facility under the force of law. That's truly a
- 14 historic event. You are to be congratulated.
- But let me get to my comment.
- 16 Taxpayer dollars are paying for this hearing.
- 17 They paid for your salaries and your contractors'
- 18 salaries while you made your long evaluation of the
- 19 application. Despite what has been said before, it has
- 20 taken a long time to get here.
- 21 Taxpayer dollars are paying for the DOE and
- 22 its contractor's salaries, as well, while the facility
- 23 itself sits ready and fully operational. Tax dollars
- 24 are paying for the EEG to evaluate independently the
- 25 safety for the State of New Mexico, and tax dollars are

1 even being spent to pay the salaries of the New Mexico

- 2 Attorney General's Office and subcontractors to pose
- 3 worst-case doomsday scenarios and pressure you to
- 4 consider them in your evaluation.
- 5 Why does the process take so long? Each of
- 6 you knows in your heart the facility is safe. Your
- 7 proposed rule represents that admission.
- 8 Congress directed you to regulate WIPP in
- 9 1993. You proposed some standards, promulgated
- 10 criteria by which you would evaluate an application to
- 11 meet these standards. DOE prepared that Application,
- 12 demonstrated it could meet the standards. Then you
- 13 evaluated that Application, and are here now proposing
- 14 to say that WIPP meets those standards.
- 15 What could be simpler than that proposition?
- 16 When Al and Bill challenged you to reinvent government,
- 17 I don't think that this is what they had in mind.
- 18 America won the Cold War in no small part by
- 19 building an enormous nuclear deterrent, and in the
- 20 process created a little transuranic waste, a
- 21 rediculously small amount of waste in contrast to the
- 22 historical significance of winning the Cold War. But
- 23 because the waste came from a nuclear weapons program,
- 24 we, as a society fearing all things nuclear, created a
- 25 complex and redundant and complicated regulatory

- 1 process to manage its disposal.
- 2 I must add this nation's regulatory process
- 3 is oft times unintelligible to the lay public.
- 4 So here we are today with you receiving
- 5 comments on the proposed rule. My comment is: You got
- 6 it right, EPA. WIPP will meet the standards you have
- 7 set it to meet.
- 8 But now you must again expeditiously move
- 9 forward and finalize the certification process so that
- 10 WIPP can start operation. Then and only then will the
- 11 tax dollars be spent on a useful and productive
- 12 service, that of permanently disposing of the waste,
- 13 instead of the environmentally irresponsible practice
- 14 of storing it in temporary storage facilities across
- 15 the nation, putting millions at risk. A small risk but
- 16 some.
- Now, you've heard very few comments here in
- 18 Carlsbad that are negative, that disagree with your
- 19 proposed rule. I guarantee you're going to hear many,
- 20 many more when you move to Albuquerque and Santa Fe.
- 21 The next opportunity for the delay of WIPP is
- 22 litigation. Listen closely when negative comments are
- 23 heard. Question the depth of technical and regulatory
- 24 understanding by those who speak against WIPP. It's
- 25 those same arguments, those same fallacious and

1 oftentimes obfuscating comments and arguments that will

- 2 be the basis of the litigation challenging your
- 3 decision.
- 4 I fully expect you to be able to meet that
- 5 challenge, and I pray that fearmongering and uninformed
- 6 delaying tactics won't once again delay the opening of
- 7 WIPP at taxpayer expense.
- 8 Thank you.
- 9 MR. WILSON: Thank you very much for your
- 10 testimony.
- 11 Anybody else -- That's the end of the list we
- 12 had here in Carlsbad. Is there anybody else here who
- 13 wants to testify?
- We will be -- Oops.
- 15 From stage left, I guess we have one more
- 16 speaker, so we will hold on.
- 17 I will just mention again the plan. We will
- 18 be in Albuquerque tomorrow and tomorrow night and
- 19 Thursday morning, and then in Santa Fe Thursday
- 20 afternoon, Thursday evening, and most of the day
- 21 Friday. So that will be the rest of the hearing
- 22 sequence this week.
- 23 And Jerome Holderness, I guess.
- MR. HOLDERNESS: Right.
- MR. WILSON: Just in time. We are almost

- 1 ready to close.
- 2 MR. HOLDERNESS: This won't take but a
- 3 minute.
- 4 I'm Jerome Holderness. I'm with Jacobs
- 5 Engineering here in town. I'm a Carlsbad resident and
- 6 member of the CTAC staff.
- 7 I would like to thank you for the opportunity
- 8 to add my comments to those of many others and to
- 9 support the timely EPA Certification of the WIPP, the
- 10 Waste Isolation Pilot Plant.
- 11 I've been associated with the WIPP project
- 12 since 1981 when I first moved out to New Mexico from
- 13 back east to assist in the performance of the
- 14 scheduling function for the project at that time.
- 15 Little did I know that 16 years later I would be
- 16 speaking here now about only commencing operations on
- 17 that project.
- 18 From those early days, before construction
- 19 even started on the project, I can bear witness to the
- 20 fact that there has always been a serious commitment to
- 21 executing this project safely and carefully and in full
- 22 compliance with all environmental protection
- 23 considerations.
- When I left the WIPP project in 1983, it was
- 25 to pursue other opportunities as a civil engineer for

1 the U.S. Air Force, and for eight years to provide the

- 2 budget and scheduling support for another DOE project,
- 3 a remediation project that has essentially completed
- 4 permanent disposal of radioactive and hazardous waste
- 5 at 26 sites across the United States. Some of you here
- 6 know which project I'm talking about. That project
- 7 could not have been completed if it had not been
- 8 allowed to begin.
- 9 I resumed work on the WIPP project as part of
- 10 CTAC's staff just over two and a half years ago.
- 11 Rejoining the project after 12 years has brought
- 12 several things into focus for me, and I'd like to
- 13 share them with you.
- 14 First, it reminded me of the commitment to
- 15 quality that has marked this effort from the beginning.
- 16 Clearly, extraordinary efforts have been made
- 17 over the years and are being made still today to ensure
- 18 that this facility not only the meets all applicable
- 19 safety and environmental protection requirements but
- 20 exceeds them whenever possible. The people associated
- 21 with this effort take pride in doing things better than
- 22 anyone else has done.
- 23 Second, an inordinate number, in my opinion,
- 24 of confirming and sometimes redundant tasks have been
- 25 undertaken to ensure the safety of not just the

1 environment but the workers on this project. Backup

- 2 safety systems and generous safety margins abound in
- 3 all aspects of the design, operational parameters, and
- 4 human interfaces associated with this facility and the
- 5 national program which it supports.
- 6 Third, it is clear that the time has come to
- 7 get on with it. The "i's" have been dotted, the "t's"
- 8 crossed, and the checks have been checked and
- 9 rechecked. With the commitment to quality that exists
- 10 here, and the holistic or system view that deals with
- 11 changes in the project, I am confident the facility can
- 12 be operated safely.
- 13 Finally, it's ironic that I left this program
- 14 12 years ago, helped complete a similar project, and
- 15 now come back and find this one has not been allowed to
- 16 start operations. As a taxpayer I am more than ready
- 17 to see the results of my considerable investment
- 18 realized. I fully support the immediate certification
- 19 and commencement of operations at the Wipp.
- 20 And I thank you for this opportunity.
- 21 MR. WILSON: Thank you for coming. Glad you
- 22 made it just in time.
- 23 With that, I would just like to express our
- 24 appreciation to everybody in the Carlsbad area who came
- 25 to give us testimony. It was all excellent. We will

1	consider all the testimony we get.
2	A reminder that the hearing record is open
3	until the end of February, so if anybody didn't get a
4	chance to comment and would like to, or wants to react
5	to something they heard that somebody else said, or
6	expand, or has new information for us, if you get it to
7	us in writing by the end of February, we would
8	appreciate it. All the testimony we get at these
9	hearings and all the written information we get will be
10	considered before we issue a final decision in May.
11	With that, I'd also like to express all of
12	our appreciation to the community of Carlsbad for the
13	hospitality over the last couple of days.
14	And with that, we'll close this hearing and
15	move to Albuquerque. Thank you very much.
16	(Note: Proceedings adjourned at 2:58 p.m.)
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DAY 2 - JANUARY 6, 1998 - CARLSBAD, NEW MEXICO

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1	COUNTY OF TAOS)
2	: SS
3	STATE OF NEW MEXICO)
4	
5	REPORTER'S CERTIFICATE
6	I, MARY THERESE MACFARLANE, do hereby
7	ccertify that I am a Certified Court Reporter for the
8	State of New Mexico; that I reported in shorthand the
9	testimony given at the Environmental Protection Agency
10	hearing held in Carlsbad, New Mexico on the date of
11	January 6, 1998; and that the foregoing transcript,
12	consisting of pages numbered 1 through 78, inclusive,
13	was transcribed by me from my stenographic notes, and
14	is full, true and correct transcript of said testimony,
15	to the best of my ability.
16	Dated this 9th day of January, 1998.
17	
18	Mary therese Macfarlane
19	Certificate No. 122 License expires: 12-31-98
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