AFTERNOON SESSION
ALBUQUERQUE, NEW MEXICO

PRESIDING OFFICER: Good afternoon everybody. I'm Dick Wilson from the U.S. Environmental Protection Agency. I want to welcome everybody here to a continuation of our public hearings this week in New Mexico on our proposed decision to certify WIPP, the Department of Energy's Waste Isolation Pilot Plant known as the WIPP is in compliance with EPA's radioactive waste disposal standards.

I'm Dick Wilson and I'm the Acting Assistant Administrator for the Environmental Protection Agencies Air and Radiation program, and will be the presiding officer here today and tomorrow.

Before starting with public comment, a few procedural items and background on the purpose of the hearing.

First of all, let me introduce you to the other panel members. With me this morning are Larry Weinstock, Frank Marcinowski, on my left and Mary Kruger on my right, all of whom are actively involved in the radiation program.
with EPA and particularly the WIPP project.

Now some of the ground rules for the hearing. It's

an informal legislative public hearing. There isn't any

cross-examination, people will present their statements.

They may be questioned by the panel members. We're here to
listen to your comments. We have a court reporter who will produce a transcript of today's proceedings. If you have a written copy of your statement it would help a lot if you could give it to us, particularly to the reporter.

I'd ask all of the witnesses to start out with saying your name and spelling your name and your organization so the reporter can have it correctly.

We have allowed individuals five minutes to testify, people representing organizations will be allowed ten minutes. Again the purpose of the hearing is to solicit public comment on our proposed decision to certify that the WIPP is in compliance with our radioactive waste disposal standards, and I would ask people to please confine their comments to that subject. We're going to be here all day. Actually we'll be here as late as we need to be to make sure anybody who has comments has a chance to make them to us.

We're scheduled to be here until 9:00 tonight. If we need to stay later, we will.

People who registered in advance were given the time to speak. Others, if there are others here now who
haven't registered but would like to speak, if you'll check
in with the registration table outside, we'll do our best to
accommodate your schedule.

We're going to use a timer for the hearing. As I
said, we have a lot of people who want to testify, and we're
going to hold people to the five- and ten-minute time rule in order to make sure everybody has a chance to give us their comment. There's a little timer here. Basically it will start green. When you have about three minutes left it will turn to yellow, and when it turns to red, I will ask you to please conclude your comments.

I remind you that we'll gladly accept written comments today or anytime up until February 27. The comment period is open until the end of February, and written comments are accepted up until then. Anybody who has more than five- or ten-minutes worth to tell us today, we'll be happy to take it in writing, or if you have thoughts after hearing other people comment or additional information to give us, please feel free to do so. Please see the information table and refer to the fliers that are available outside regarding docket locations and hearing ground rules.

The transcript for today's hearing will be available at each of the EPA dockets in about two or three weeks. So that's how the hearing's going to work.

A little bit of background on why we're here. In
1992, Congress required EPA to insure safety of the WIPP site, and in response EPA set disposal standards in 1993, requiring DOE to demonstrate that WIPP will be a safe disposal facility for thousands of years into the future. Then in February 1996, EPA followed those general standards
with more specific compliance criteria relating to WIPP.

The compliance criteria is to clarify the requirements of the radioactive waste and it is over regulations that require DOE to provide EPA with specific types of information in its compliance certification application.

Then in October of 1996, EPA received DOE's Compliance Certification Application and immediately began our review for completeness and technical adequacy. In November of 1996, we announced that the application had been received and solicited public comment on the application and announced our intent to conduct the rule making. That began a 120-day comment period and public hearings to obtain comments were held in New Mexico in February of 1997. Then in May of 1997 after those hearings, we determined that DOE's application was complete, and by law EPA has one year from this date, May of 1997 until May of 1998, to make a final decision on the certification.

We have consulted with scientific experts and the people of New Mexico prior to issuing a proposed decision.
We've reviewed the information on the WIPP's ability to safely contain radioactive waste, and as required by EPA standards, DOE has had the necessary portions of the application peer reviewed by independent experts.

On October 30, 1997, we issued a proposed decision.
that WIPP will comply with the requirements of our
radioactive waste disposal regulation and compliance
criteria.

We're proposing that DOE meet four conditions for
certification. These are first: EPA must approve the
execution of waste characterization activities, including a
determination of the radionuclides and other content of waste
disposal containers currently stored at waste area sites
before the containers allowed to be transported to WIPP for
disposal.

Secondly, EPA must approve the establishment and
execution of quality assurance programs for waste
characterization activity before the containers are allowed
to be transported to WIPP for disposal. Quality assurance
programs will confirm the waste characterization is done
properly.

Three, DOE must submit to EPA prior to closure of
WIPP a detailed plan and schedule for implementing
institutional control, including an elaborate marker system
intended to warn future generations about the hazards of the
radioactive wastes buried at the WIPP.

Four, DOE must seal waste storage panels within WIPP with strong concrete barriers that are engineered to contain hazardous material.

Having made our decision, we are here to obtain
feedback from New Mexico citizens on the proposal. We're also, as I mentioned earlier, accepting written comments on our proposed decision. All written comments must be received in the EPA docket by February 27 of this year.

I want to assure you that all written and oral comments will be carefully considered before we make a final decision in May of this year as to whether WIPP complies with EPA regulations.

Again, I want to thank all of you for taking the time to come here today. With that we'll begin the testimony.

The first witness on the schedule is Kent Hunter of DOE.

KENT HUNTER: Thank you. I want to express my appreciation to the EPA and specifically the panel for an opportunity to present a statement I'll read to the panel.

My name is Kent Hunter. I'm an employee of the DOE and I'm representing today the Carlsbad Area Office.

I've been working on nuclear waste issues for the past 15 years. I believe that environmental cleanup of DOE
facilities around the nation is critical to the future well
being of the United States of America.

Over ten years ago I moved my wife and four
children to Carlsbad, New Mexico in order to work directly on
the WIPP, the first step in a solution to nuclear waste

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disposal and a final step in clearing up the nuclear waste legacy from the cold war.

I am family and community oriented. I would not be working on this program if I did not believe it to be safe and environmentally responsible.

Removing nuclear waste from above ground temporary storage scattered across the United States and disposing of it 2,000 feet below ground, in 250 million year old bedded salt is the right thing to do. The WIPP is the right thing to do.

I am the DOE Carlsbad area office assistant manager responsible for the Office of National TRU Waste Operations. You might say this is equivalent to being the chief operating officer. I have more or less had the same responsibility since coming to Carlsbad in June of 1987, and I have seen the technical and scientific superiority of the WIPP proven and demonstrated over and over again.

The WIPP and the National TRU waste system were ready to operate in 1988. Nothing technical, nothing scientific has changed since then. What was missing in 1988
21 was basically a license to operate.
22 Now the EPA with the subject proposed rule has
23 taken the first step, the biggest step and perhaps the final
24 step in issuing a long overdue license that will allow the
25 WIPP to finally fulfill its mission, cleaning up the.
The Carlsbad area office has a deep appreciation for the long arduous task the EPA has engaged in to develop the proposed rule. Thousands of technical and scientific documents with sometimes opposing points of view have been reviewed, analyzed, and considered by the EPA. The technical experts have poured through DOE and contractor records, have audited DOE and contractor processes, facilities, and procedures, and have made some very difficult, technical decision.

The proposed rule and the technical basis for the rule are detailed, well founded, and reflect the high quality and professional work of the EPA that preceded them. In addition, the EPA has insured the public involvement in the process has occurred at unprecedented levels.

However, the proposed rule does include four conditions. None of the four conditions add anything to public health and safety or protection of the environment. All for increase costs to the American taxpayer with no value added. DOE has five years to provide additional analysis for conditions one and four. Therefore, DOE believes inclusion
of these two conditions in the final rule is acceptable.

Conditions two and three will immediately impact the ability of WIPP and the TRU waste transportation system to operate in an efficient and cost effective way.

Conditions two and three will immediately impact
the ability of the Idaho National Environmental and
Engineering Laboratory and the Rocky Flats Environmental test site to begin the TRU waste cleanup activities.

Conditions two and three are inconsistent with the basis and conclusions of the rest of the proposed rule.

Conditions two and three will involve the EPA in a process not required by 40 CFR 194, and not address the EPA's Compliance Application Guide.

There is no technical or scientific basis for conditions two and three and these two conditions will needlessly involve the public in an unnecessary process that is not defined, and serves no purpose other than to give intervenors the opportunity to delay activities at the various TRU waste sites around the country.

The DOE's quality assurance program, specifically that of the Carlsbad area office, provides the necessary oversight and controls for both activities at the WIPP and activities at the DOE TRU waste sites across the nation.

This program and associated site certification procedures and processes have been fully described in the
Compliance Certification Application. The program is fully developed, implemented and executed, and has been observed audited and verified by the EPA. The EPA unconditionally endorsed this program throughout the proposed rule. 40 CFR 194.24 subsection (a)
required the DOE using process knowledge, among other things,
describe the total waste inventory proposed for disposal in the disposal system. This requirement has been met by the DOE in the Compliance Certification Application, and has been fully endorsed by the EPA in the proposed rule.

40 CFR 194.24 subsection (b) required the DOE to analyze all waste characteristics and components as to potential impacts on the disposal system. DOE accomplished this by analysis of the total projected waste inventory, and documented this analysis in the Compliance Certification Application. The EPA in the proposed rule recognizes that DOE meets the requirements of subsection (b).

40 CFR 194.24 subsection (c) required the DOE to specify limits derived from the subsection (b) analysis for the total inventory of such waste proposed for disposal in the disposal system. The DOE provided the limits in Appendix WCL of the Compliance Certification Application, and the EPA states in the proposed rule that the DOE has met this requirement.

Conditions two and three of the proposed rule are
predicated on perceived deficiencies in complying with the requirements of 40 CFR 194.24 subsection (c) paragraphs three, four, and five. Paragraph three requires that the use of processed knowledge conforms with the quality assurance requirements of
1 40 CFR 194.22. By validating in the proposed rule that the
2 requirements regarding process knowledge in 40 CFR 194.24(a)
3 have been met, the EPA has already agreed this paragraph
4 three requirement has been met.
5 The proposed long-term public review and EPA
6 involvement in the detailed site certification process which
7 is done for individual waste containers cannot add any
8 quality assurance to the past use of process knowledge for
9 projecting and analyzing the total inventory.
10 Paragraph four requires that a system of controls
11 be implemented to confirm that the total amount of each waste
12 component that will be placed in the disposal system will not
13 exceed the limits established as safe.
14 The DOE utilizes the waste information system and
15 computerized data base to meet this requirement and has fully
16 described the system in the Compliance Certification
17 Application.
18 The EPA has reviewed, observed and audited this
19 system and has approved this system in the proposed rule.
20 Paragraph five requires that the same controls be
identified and described and that they are applied in

accordance with the quality assurance requirements found in

194.22. Again, the WIPP waste information system is fully
identified and described in the Compliance Certification

Application, and EPA has validated this system and associated
quality assurance controls in the proposed rule.

In summary, the EPA has promulgated a good rule, 40 CFR 194, to establish the conditions and requirements for regulating WIPP. Rightfully so, 40 CFR 194 uses a systems approach for the entire disposal system and considers the total waste inventory as a part of that system.

DOE has established limits for the total waste inventory, and because of the magnitude of proposed inventory and the excellence of the WIPP geology, these limits are very few and they are very gross. So few and so gross that even if there were no controls at TRU waste sites it is not reasonable that any one way could cause the WIPP to approach these limits, limits that cannot be approached for the total DOE waste system for 35 years.

Keeping track of those gross limits is not rocket science. Complex and expensive systems and processes are not required. Likewise continued public review of TRU waste site specific technical documentation and continued EPA audits and inspections of TRU waste sites is also not required or warranted.
Accordingly, the DOE Carlsbad Area Office respectfully suggests that EPA reconsider the basis for conditions two and three of the proposed rule and eliminate these conditions from the final rule.

Thank you very much.
PRESIDING OFFICER: Thank you very much for coming today and for your testimony.

Next is Don Olsen.

DON OLSEN: Good afternoon panel and hello again from Carlsbad. I am an employee of Carlsbad Department of Development and represent the Network Corporation in southeastern New Mexico.

I have been in the Carlsbad area for three years and have become familiar with the WIPP project through the employees of the WIPP project and from the Department of Energy, Westinghouse, Sandia and the contractors associated with the WIPP project.

In addition to the citizens in southeastern New Mexico, I have had an opportunity to tour the WIPP site and to learn of the precautions and safety measures that have built into the project. I have found all associated with the WIPP site project to be dedicated, confident professionals.

I have not learned or become aware of any conditions which would prevent or delay the opening of the WIPP facility upon the final EPA approval.
As indicated previously, I have been in Carlsbad for three years. When investigating purchasing a home in Carlsbad, I learned of a number of employees associated with the WIPP project that were building and buying homes in Carlsbad. This is considered a very strong indication that
the WIPP site is safe. Based on this observation, I
committed to build a home which has just recently been
completed.

I feel that southeastern New Mexico needs the
support in getting the WIPP project open. Thank you very
much panel and audience.

PRESIDING OFFICER: Thank you for coming and thanks
for that testimony.

PRESIDING OFFICER: Next is Ernest Garcia. Is he
here?

(No response.)

PRESIDING OFFICER: Mark Miller.

MARK MILLER: Good afternoon. My name is Mark
Miller. I'm a certified health physicist and I work for Roy
F. Weston Company, an environmental engineering firm here in
Albuquerque.

I've worked for the past 21 years in the profession
of radiation protection. I've been involved in measuring,
minimizing and managing countless associated with exposure to
radiation.
First of all, I'm concerned that EPA in its October 30, 1997 proposed rule has suddenly added a new role for itself as an adjunct to 40 CFR 194. This addition is a new process for the active involvement in waste generator site certification. Until now the plan was for DOE to be the
certifying authority with EPA as an observer. This is analogous to the Publicly Owned Treatment Works Industrial Pretreatment Programs required nationwide to satisfy NPDES requirements and should serve as a model in this situation, I believe. I'm not clear as to the exact intent of EPA's position.

The proposed rule is a significant departure from plans and is not justified and should not be pursued unless it can truly add value to the process.

The excessive and duplicative certification and audit and inspection requirements have no place in EPA's proposed rule when it is published in its final form. It exceeds what Congress intended and should be excluded from any future rule making.

At a minimum the language should be toned down or clarified to fit the model the way the EPA administered the NPDES programs for POTWs or more importantly so it addresses Congress intent for this rule.

It's my understanding as several members of the U.S. Senate and Congress have contacted the EPA Administrator
regarding this concern.

My second observation is that I believe that WIPP is the appropriate and best solution for transuranic waste that has been demonstrated by other 23 years of taxpayer funded study and over 80,000 pages of technical
documentation.

Most opponents of WIPP generated little more than unfounded criticism and hot air at a minimum of expense to themselves but tremendous expense to the country in the form of continued asinine delays and unneeded further studies.

Evidence provided in the WIPP Compliance Certification Application overwhelmingly shows that WIPP will perform safely as required.

This country cannot afford unjustifiable costs of delaying the decision based on concerns stemming from unsubstantiated unfounded or exaggerated feelings addressed by some that WIPP isn't safe enough -- read this, zero risk.

WIPP is safe and a practical alternative to the present situation of temporarily storing transuranic waste at more than ten separate sites around the country that are dramatically less safe in geologic terms than WIPP.

The National Academy of Sciences recognized this 40 years ago when they identified the Salado formation as a likely candidate for this disposal facility. Add to that the fact that WIPP has been designed and built to produce a
suitable permanent waste disposal solution whose designed-
acceptable risk is vastly better than any alternative.
America, EPA and the DOE, has the fiscal and moral
obligation to open and operate WIPP now. It's time has come.
PRESIDING OFFICER: Thank you for coming. Thank
you for that testimony.

Is Mr. Garcia here yet?

(No response.)

PRESIDING OFFICER: Next is John Lee.

JOHN LEE: I would like to thank you for this opportunity to come and speak to you today. I am John Lee, Waste Isolation Division. I appear today in support of the EPA's proposed rule and urge you to complete the final rule making immediately. I would like to present my testimony both orally and in writing.

Westinghouse has been associated with WIPP for 20 years. We were selected as the WIPP technical support contractor in 1978, and have been the managing and operating contractor for the U.S. Department of Energy and WIPP since November of 1985.

These 20 years Westinghouse has worked hand in hand with our partners in the Department of Energy and Sandia National Labs. Our purpose was to develop the safest and most effective disposal for radioactive transuranic waste in the world.
The EPA'S proposed rule which presents this

decision to certify the WIPP is a vital step in the opening

of the nations first permanent underground repository for

transuranic radioactive waste.

Opening of WIPP is necessary so that defense
nuclear facilities around the nation have a safe place to put
the radioactive waste generated by the clean up and
decommissioning of those sites.

Having been at many of those sites, I believe it is
comparative the nation get on with the clean up of
significant environment problems. To do so, we must have a
safe place to put the resulting waste. Without a place for
safe disposal we will only slow down the clear up efforts and
increase the environmental and safety risks for future
generations.

The main focus of the proposed rule is long term
repository performance. A key to assuring repository
performance is analyzed is to dispose of the transuranic
waste properly.

Today I'd like to enter into the evidence that
gives me the confidence that WIPP will be operated with the
highest regard to safety and environmental and quality
excellence. This evidence takes two forms.

The first, our part record of awards and
achievements in these areas; and the second, preparations for
taking and making sure that we're fully ready to begin waste
procedures.

Westinghouse is proud of its achievements over the
past 20 years. Authority has always been and will continue
to be environmental and safety excellence. Compliance with
regulatory requirements is a cornerstone to our demonstration of excellence. We are committed to implementing to the fullest extent all of the requirements set forth in the EPA certification of the WIPP.

Our commitment to excellence in safety environmental management is evidenced by two very special honors that we have received. The first was recognition from the Department of Energy's long term protection program. That's the highest ranking for safety programs that can be received, and the WIPP was the first DOE facility to be recognized at that level.

The second honor was registry by the International Organization and Standardization's ISO 42001 demonstrating excellence in environmental management.

In addition to these special honors we have received 11 consecutive New Mexico Line Operative of the Year Awards, two recent awards of honor from the National Safety Council, Outstanding Mine Safety and Health Administration Inspection Results, and numerous awards for total quality including from the state of New Mexico Department of Energy
and from the Westinghouse Electric Corporation. We're also
recognized as the best research and development project by
the New Mexico Society of Professional Engineers.
Despite a past record of safety environmental
excellence, we have taken steps to check and cross check
ourselves to insure every aspect of the operation is good.

Preparations over the past year have been extensive. We have conducted an in-depth review including almost 1200 individual area assessments. To this review we insured that all requirements to operate the facility are in place. Every requirement or even potential requirements were included in this review including things like the anticipated EPA Mile certification requirements and anticipated New Mexico record permit requirements.

We recognize that the reviews alone cannot demonstrate excellence, therefore, we treated the WIPP facility as if it were open and operational. This allowed us to simulate all aspects of WIPP operation. By so doing, we insured that all the site processes have been verified and that all personnel are not only qualified and ready, but also proficient in the performance of their duties.

The final step in insuring readiness of the facility, people and procedures was an extremely successful performance demonstration. This demonstration not only included WIPP site activities but also included the
transportation activities of the generator site.

Beginning on September 16, 1997, employees at the Idaho National Engineering and Environmental Lab shipped three containers with 42 55-gallon drums filled with sand as simulated waste to the WIPP.
Every process step was tested during the exercise.

This included every step from inspection of the mock waste shipments as they left the site in Idaho, to final unloading and placement in the underground at the WIPP.

In addition to all normal waste disposal activities, Westinghouse personnel participated in a series of graded drills to judge response time. Several regulators, oversight groups and stakeholders observed the demonstration.

We successfully completed every aspect of the demonstration with no deficiencies noted by the review team.

A number of our personnel were also involved in first interstate shipment of defense related transuranic waste from the Teledyne Ground Laboratory in New Jersey to the Rocky Flats Environmental Technology site near Boulder, Colorado. The shipment was an exemplary illustration of how transuranic waste can be shipped effectively and safely using the TRU pack transportation system.

As we approach the opening of WIPP, the preparations continue to intensify. Next week we will begin the first two operational readiness reviews to further
demonstrate readiness to operate this unique facility.

This review utilizes a team of outside experts to review and validate Westinghouse's ability to operate WIPP. The second operational readiness review will then be conducted by a team of national experts from the Department
of Energy. These two required operational readiness reviews
fully confirm and document that the WIPP will be operated in
compliance with all regulations and orders.

Our employees are among the safest in the
Department of Energy and the nation because they are highly
trained. They are the engines that power the facility.

These are the same employees who live and raise their
families in Carlsbad which is located only 26 miles west of
WIPP.

They are, without a doubt, a highly trained group
of people who believe in the WIPP and want to get the job
done correctly. They will be the first to tell you it is
time to open the WIPP and begin dealing with the
environmental problems that have been delayed far too long.

These same people are the strongest supporters of the site
safety programs.

One of our greatest achievements occurred in
October 1996 when the Compliance Certification Application
was committed for the EPA's review. Preparation and review
of the document is a monumental task, as you all know. With
this thought in mind, I'd like to applaud the EPA for your efforts.

The EPA and the public should be confident in the environmental and safety excellence of the WIPP.

Environmental and safety excellence has been repeatedly
demonstrated at the WIPP, and they are essential elements of our culture.

Let me reiterate as the management and operating Contractor for the Department of Energy at the WIPP, we're proud of our achievements. Our job is operational, environmental and safety excellence, and we're committed to it.

Thank you very much.

PRESIDING OFFICER: Thank you for coming and for your testimony today.

Is Mr. Garcia here yet?

(No response.)

PRESIDING OFFICER: The next witness is Dan Funchess.

DAN FUNCHESS: I'm Dan Funchess representing myself from Carlsbad. I appreciate the opportunity to address the panel and I'll be just very brief. I'm a citizen of Carlsbad. I was born in Carlsbad in 1962, and I'm on no one's payroll to be here today. I took my own individual time to drive up this morning and to speak my five minutes.
I've written just a few things to try to express my concern about the EPA guidelines and such, and in no way am I a scientist. Living in Carlsbad, we've come to realize that the WIPP project is an integral part of our community in many,
many facets, and living with and dealing with all the
individuals involved with WIPP has been really tremendous,
because if you interact with the individuals, you realize
they are the most highly educated people, highly trained and
highly committed individuals that we have in our community.
And as far as investment in the community, they are
really tremendous and really set the standards for many of
our community organizations.
WIPP itself has been the subject of many debates,
and I'd like to make a statement that I believe unfounded
concerns from environmentalist groups and pardon the pun, has
been on the environmental WIPPing post for quite some time.
And the concern I have is that most of those opposing WIPP
either do it out of an extreme environmental position or
perhaps maybe an opportunist with a political ambition.
If one were to look just at the WIPP facility and
all the aspects surrounding that, you would realize that in
many cases it's an overkill situation and the people in
Carlsbad are comfortable with WIPP.
Those that live in that area need WIPP, and I would
21 like to say I believe New Mexico needs WIPP and most of all
22 the United States needs WIPP.
23 The EPA has a pamphlet that I picked up as I came
24 in, and the four principles that are required of EPA are
25 protection, good science, proper consultation and commitment.
I believe EPA has gone above and beyond those four guidelines, and I would like to encourage you to move forward on the project and approve the licensure of WIPP and the certification of WIPP.

I appreciate your time and appreciate the opportunity to be here. Thank you.

PRESIDING OFFICER: Thank you for taking the time to come here today.

Mr. Garcia?

(No response.)

PRESIDING OFFICER: Okay, next is Don Hancock.

DON HANCOCK: My name is Don Hancock with Southwest Research and Information centered here in Albuquerque.

Unfortunately we have to start out with a little store they I've told before. Among the many good things my mother told me when I was growing up is I had a very loud voice and that I shouldn't talk to people, shouldn't have my back to people when I talk.

EPA has heard this many times before and it's unfortunate sometimes when you set things up you have the
podium on the side and the microphone on the side so we can
address you and we also don't have to have our back to the
audience. So it's unfortunate do that today and I hope you
will remedy that problem.

Mr. Wilson in his opening comments talked about
why we're here today. I want to start with that too, except,
of course, the reason we're here today goes back farther than
where you started.

Almost ten years ago at hearings in New Mexico,
hundreds of New Mexicans had signs like this saying, WIPP
must meet new EPA standards. You all weren't around at that
time because EPA had no role in WIPP.

The reason people said that is we were tired -- and
not only we in New Mexico, but people all over the
country -- were tired of the Department of Energy's handling
its facilities and its waste with no regulations,
self-regulation they like to call it. We call it no
regulation.

So a lot of people in New Mexico have said we need
to have independent regulations. That's the reason that the
Land Withdrawal Act, which you mentioned in 1992 was passed,
to give you all this role.

We've always had concerns about whether EPA would
have the technical capability and will to really be an
independent regulator, to protect public health and safety
for present and future generations. That's your task. It's a very difficult task. And it's one that we hoped EPA would meet, although there were some early warning signs, and one I want to mention.

One example of this is July 21, 1992, during the
floor debate in the House of Representatives on that WIPP
Land Withdrawal bill. Then Congressman Howard Wolvey (sic) stated, and I quote, asking EPA to oversee DOE is like asking Bambi to ride herd over Godzilla. To date EPA has been unable to hold DOE accountable for even the most blatant violations of environmental laws. Do we really believe it will be able to keep DOE in line on this project? Well, now it is five and a half years later. Do we need to answer congressman Wolvey's question? Unfortunately the answer is based on the proposed rule that EPA apparently doesn't have the technical capability or the will to serve as an independent regulator.
WIPP is a blind site especially so because it's in an area surrounded by oil and gas and potash which also lie within the boundaries of the site which lead to short term and long term problems with the facility. But EPA has systematically avoided, in its proposed rule, looking at realistic scenarios and using valid parameters and validated models that result in violations of the disposal regulation. What the proposed rule shows is that EPA did not
evaluate at all the impacts of air drilling into the site.

EPA did not realistically evaluate the impact of drilling with mud, which again results in releases that violate the disposal regulations. EPA did not evaluate releases from fluid injection even if it occurs outside the site boundary,
which can lead to violations of the standard, let alone fluid
injection within the site boundary, also leading to violation
of the standard.

EPA did not evaluate carbon dioxide injection for
overrecovery even though that again is another realistic
scenario that results in violation of the disposal
regulations.

Now, based on a conversation that I had with some
of you this morning, you said, well, we're working on the air
drilling issue. We're going to do a report on air drilling,
and the public is going to have an opportunity to comment on
that air drilling report. And I appreciate that because that
is a requirement.

However, unfortunately, the report that you say
brought this to your attention by Dr. John Reiderhoff (sic),
was submitted on October 10, to EPA -- October 10 of 1997.
So you've had it for three months and it's going to take you
another few weeks to finish your report, so let's say it
takes you four months to comment and respond on Dr.
Reiderhoff's report. We in the public are supposed to be
able to respond to EPA's document in 30 days.

This is just an example of how EPA is short circuiting the public. Its own processes, EPA's processes, EPA is not doing its job.

In its proposed rule, EPA did not use realistic
solubility values including no backfill solubility. EPA did not use realistic permeability based on actual experimental data partly because DOE and Sandia haven't produced such experimental data.

EPA did not use realistic retardation coefficients.

EPA did not use the probability of one, that a pressurized brine reservoir underlies the waste rooms, even though that's the only assumption that you can use unless you kind of offer actual experimental truth that there is no brine there.

EPA did not require drilling rates that are consistent with the expensive drilling throughout the area.

EPA did not use real waste characterization inventory and repository limit information, and you didn't look at, for example, your own federal government experience in looking for examples of reliability of data at Rocky Flats, where an FBI raid and expensive investigation revealed a lot of falsified information at Rocky Flats.

EPA did not use realistic flat tractor flow modeling using the LEMF model. EPA did not and still has not modeled the real life base flow to show that its models are
21 valid. The only modeling record that shows that, that uses
22 that shows major violations of the standards.
23 You did not use realistic data in modeling a
24 Rustler flow. You didn't use 3B backflow modeling. You
25 didn't use realistic shaft bored hole and panel seal
performance estimates.

All of these things need to be done. And they need to be done by EPA. EPA needs to do them in new performance assessments and allow opportunity for public comment on them.

A further very troubling aspect of EPA’s proposed rule is the agencies refusal to disclose the names and qualifications of its contractor personnel, even though my organization has requested it three times before today and the fourth time this morning, and have always been refused.

Mr. Matthews, EPA’s lawyer, has told us it’s irrelevant. Well, it’s not up to EPA to determine relevance. EPA should be accountable for the millions of taxpayer dollars it’s spending for the qualifications of its technical contractors, so that it can be determined whether they in fact do have the world class science backgrounds that are needed and whether they have conflict of interest.

A very puzzling question is why EPA is behaving this way. It is, by its name, supposed to be the Environmental Protection Agency. EPA needs to explain what happened.
Based on the records so far it appears that based on pressure from DOE and Congress in secret meetings in March and April of 1997, that EPA was pressured to prematurely approve unsubstantiated and invalidated parameter values which it included in its March 19th letter to DOE.
It appeared there was pressure to hurry up with the
completeness determination in that industry referred to, even
though the application done none still is incomplete.

If EPA was doing its job, it would have done these
things. Instead what EPA did was do the performance
assessment verification test, even though it knew those were
tests using parameters that result in compliance. What's the
point of doing that?

There have been additional contacts between EPA and
DOE since then, since the Compliance Application was deemed
complete. If it was complete and if EPA had adequate time
and expertise, why did they need to have those continuing
secret meetings?

EPA, it's time to do it right. Use valid models,
realistic scenarios and parameters and conduct new CCDF's.
You have the burden and you have the responsibility to be the
independent regulator. I hope you'll do it because given
your promise to get a decision out in May, you can't do the
things that need to be done. So I hope this one prediction
that I'm going to make, that you won't do what you need to
21 do, you won't provide adequate public comment and that you
22 won't do the kind of P. A. runs that I'm talking about, I
23 hope I'm wrong about that tradition.
24 It's up to you to do it, not for me, but to protect
25 the public in New Mexico now and for future generations.
Thank you.

PRESIDING OFFICER: Thank you Mr. Hancock for your testimony this morning.

Is Mr. Garcia here?

(No response.)

PRESIDING OFFICER: Next is Jeanne Carlston.

Is she here?

(No response.)

PRESIDING OFFICER: Susan Pickering?

SUSAN PICKERING: I'm here. Thank you. My name is Susan Pickering. I've lived in Carlsbad the last 13 years.

I'm a quality assurance manager for Sandia National Lab on the WIPP Project, but I'm here today as an individual not as representative of Sandia.

I'd like to discuss at least one of the many reasons that I agree with EPA's proposal to certify WIPP.

Prior to my experience at WIPP, I did not have much interaction with EPA. Like most people in the audience today, my experience was pretty much limited to newspaper and T. V. coverage. My message today is as much for the public
behind me as EPA in front of me.

All of that changed two years ago when EPA began to review the DOE work for the compliance application. Two separate teams, one technical and one quality assurance were at the Sandia offices and records center almost the entire
time for the last two years. The team made up of EPA staff
and contractors had tremendous experience in environmental
sciences and Q. A. and degrees in high powered fields such as
nuclear engineering and law.

They spent months learning how our conceptual modes
were developed, how our codes were written tested and used,
understanding how and why our data was collected, and how all
of were used in the Compliance Application.

These teams reviewed hundreds of thousands of
records, including data packages, parameter packages and
analysis packages. They verified that our staff were
qualified, our brine core samples were properly collected and
handled, our gauges were properly calibrated and that our
procedures and plans were properly reviewed and implemented.

The EPA team accompanied Sandia when we audited our
own subcontractors to assure the work that they performed had
the same high quality assurance and technical standards.

In summary, EPA left no stone unturned during their
review of the WIPP. They did an exhaustive review of
Sandia's work. My experience with EPA over the last two
years has given me confidence that when they say a treatment
certainty should be permitted, they have based their decision
on a thorough review and comprehensive study of the activity.
Similarly the public which has not been involved
with the EPA's extensive review of WIPP should have that same
confidence that the EPA again has done a thorough and
comprehensive study.

These reviews are one of the reasons that the
public can accept the EPA's conclusions and recommendations
with confidence. Thank you.

PRESIDING OFFICER: Thank you very much for that
testimony.

Next I have Lily Rendt.

(No response.)

PRESIDING OFFICER: Ernest Garcia or Jeanne
Carlston?

(No response.)

PRESIDING OFFICER: Joe Tilleison?

(No response.)

(No response.)

PRESIDING OFFICER: Jenny Van Winkle?

(No response.)

PRESIDING OFFICER: Pat Carroll?

(No response.)

PRESIDING OFFICER: Penny Zigleod?
PENNY ZIGLEOD: My name is Penny Zigleod, and I'm speaking to you today as a layperson.

I moved to New Mexico five years ago. I have lived with MS since 1980. I was in remission for 11 out of those 13 years. I was in remission when I moved to New Mexico.
Within five months of moving here I have started having difficulties in walking which have just gotten worse.

I once went to an art show in New York of MS art, and there was a map of MS in the United States. The majority, the biggest pocket of MS in the United States is around Denver, Colorado. Helen Calcot said, the most irradiated city in the United States should be evacuated and nobody should live there.

I have a friend whose husband has worked in Los Alamos, and I hear that there's more and more MS in Los Alamos. People in Carlsbad are going to see more and more MS.

That's the result of radiation. Thank you.

PRESIDING OFFICER: Thank you for coming.

Hank Theiry.

HANK THEIRY: Good afternoon. I'm affiliated with quite a few public groups, but I'm speaking on my own behalf today. I'm not a scientist, I'm a Vietnam veteran, community advocate and concerned citizen.

A quick history lesson. Our nation's legal
justification for getting us into the Vietnam situation was

the gulf of Tonkin (sic) incident. Do any of you remember

the gulf of Tonkin incident? P.T. boats or some kind of gun

boats from the north Vietnamese attacked, supposedly, the 7th

fleet. Now what's absurd as that imagine is, we use that as
a justification in our Congress to go ahead and send 59,000
people to their deaths in Vietnam. And we, of course, later
on found out that was a fabrication.

And I just wondered if we also thought about how
many thousands of people because of that war lived through
the war but came home and died various degrees of horrible
deaths due to agent orange or post traumatic stress syndrome.

And, of course, the government, as you recall, said they
didn't have anything to do with that and that didn't really
happen. Agent orange didn't really happen and no one was
responsible.

Then the beautiful Vietnam -- if you can call it
beautiful -- the Vietnam war memorial in Washington, is a
tribute to my fellow comrades.

For years we have witnessed the tragic after
effects of pharmaceutical drugs approved by a fellow
government agency, the FDA. I was looking in your book, this
little handout you have on implementation of the Waste
Isolation Pilot Plant Land Withdrawal Act, in which there is
a great phrase called scientifically credible manner. I love
that. Most of these drugs that have been found out to kill
hundreds and hundreds of people, thousands of people, one of
them my wife's mother died of a cancer caused by an FDA
approved therapeutic treatment. I believe it was some kind
of unopposed estrogen treatment, and I believe that was a
scientifically credible -- and that was approved, the
methodology used to come up to justify that was
scientifically credible.

There are thousands and thousands of examples of
science that at one time was good science and later on became
bad science.
The response unfortunately from the government in
most of those situations is that -- again they use this
scientifically credible data -- and nobody is responsible.
Nobody ever comes up and says, yes, it's my fault. Nobody
every takes the hit for this stuff.
Nobody did for agent orange. Nobody did the for
the Gulf of Tonkin incident and nobody does it for all these
drug situations where people are killed with what they
thought at the time was a good thing.
I'm sure that some of you really believe that the
science they are using the and the information is good, solid
stuff. But in 50 or 100 years it's not going to be.
Some people, as you've heard already and tonight
you're going to hear them talk to you, are going to talk
about the fact that this land's not solid right now. But I'm not a scientist.

My history of science tells me that people like -- who come up with new information initially nobody believes them and later on people found out that the
information they gave was good information.

So my question I have is where will you build the WIPP Memorial Wall. We've seen the Vietnam Memorial wall, where will they build the WIPP Memorial Wall? It will have on it the names of all of the people that died because of a decision that's already been made possibly in the back rooms of EPA, DOE, jobs for Carlsbad, et cetera.

Then, I can imagine all of the flowery denials that we'll hear when the body counts begin to mount. And, of course, no one will be responsible.

I also want to know what right anyone has to make this decision that will have such lethal affects for many years to come based on science that never worked.

Back to the building of the WIPP memorial. It would bring jobs to New Mexico, so we'll probably try to get it built here. And I'm sure Senator Domenici will lobby to have it build here.

And finally as a citizen and a Vietnam vet whose seen the least results of so many past lives, corporate and politically motivated decisions, I think our best bet is to
use WIPP as a tourist attraction and a self storage facility for people's cars and clothes and things. That way the taxpayers might get some of their money back and nobody has to get killed by another poor decision that no one is responsible for. Thank you very much.
PRESIDING OFFICER: Thank you for coming and for your comments.

Roberto Ribal?
(No response.)

PRESIDING OFFICER: Ernest Garcia?
(No response.)

PRESIDING OFFICER: Jeanne Carlston?
(No response.)

PRESIDING OFFICER: Lily Rendt?
(No response.)

PRESIDING OFFICER: Joe Tilleison?
(No response.)

PRESIDING OFFICER: Lyndia Spurling, Any Nixon, Jenny Van Winkle, Pat Terrell, Penny Manes?
(No response.)

PRESIDING OFFICER: I think we're a little ahead of schedule. I think we'll take a ten-minute break.

UNIDENTIFIED SPEAKERS: I'd like to speak.

PRESIDING OFFICER: We have time. Come on up.
UNIDENTIFIED SPEAKER: I'd like to speak about insurance.

PRESIDING OFFICER: Can you give your name.

LILLY ZARAGOZA: Oh, I'm Lilly Zaragoza from Albuquerque.
I don't know if people are aware that they are getting a notice in their insurance. It is a nuclear energy liability exclusion rider, and all coverage parts included in the policy are as such, under the liability coverage to bodily injury or property damage, resulting from the hazardous properties of nuclear material and with respect to which any person or organization is required to maintain financial protection.

In other words, they have to have a separate type of insurance, for instance, just like you would carry earthquake insurance separate from your regular insurance or you carry flood insurance or you're not going to be covered. Under any medical payment coverage to extend incurred with respect to bodily injury resulting from the hazardous properties or nuclear materials and arising out of the operation of a nuclear facility by any person or organization, these are things that are being excluded.

The nuclear materials is any nuclear facility owned by or operated by -- which is Westinghouse or on behalf of any insured or has been discharged or depressed therefore.
In other words, these people are not going to be covered once they leave that job. But the contamination has already occurred in their body. We know that from experience. From all of the people that were radiated with the atomic bomb and with the atomic bomb experiments, we
already know that even though it is being denied, it has been
denied.

The nuclear material is contained in spent fuel or
waste at any time possessed, handled -- that's your
handlers -- used, processed, stored, transported or disposed
of by any or on behalf of an insured person.

In other words, who is going to cover these people?

To me there is no liability. They are not taking liability
for anything. Once you're exposed to it, they'll say prove it,
and that is one of the hardest things to prove, because no
doctor will verify that that person was exposed to nuclear
material. They will not verify it. Or that the illness that
is connected with it is verifiable. It is not.

The bodily injury or property damage arises out of
the functions by an insured or service material parts of
equipment in connection with the planning, construction,
maintenance, operation or use of any of the nuclear facility,
but if such facility is located within the United States of
America or its territories, they are excluded.

And where is WIPP? It's not out of our territory.
It's not out of the United States, but who is going to cover
these people in an event of an accident?

You may say, oh, DOE is going to make sure, the EPA
is going to make very sure that no accidents happen. But
didn't they say that about Chernobyl. Didn't they say that
about Three-Mile Island? What happened? Accidents did
happen. They will happen. We don't know how many, we don't
know where, but we know they are going to happen.

As used in the endorsement, hazardous properties
include radioactive, toxic or explosive properties. Because
this material has been stored for so many years, nobody knows
exactly what is contained in some of those containers. They
may know -- they may know 80 percent of them, but what
happens to the other 20 percent. We don't know.

You don't know what reaction of those chemicals,
what happens when those chemicals come together, they form
gases. We know that.

I'm not a scientist, I'm just a layperson, but even
I know that gases form in those containers and they will be
explosive. We don't know if by transporting them.

Now, Westinghouse just said --

PRESIDING OFFICER: Ma'am, your time is up, so if
you could reach a conclusion.

LILLY ZARAGOZA: They said in transporting they've
tested sand, but the thing is sand doesn't explode. The
gases will. And they are transporting even nuclear reactors.

Any equipment used for separating the isotopes or uranium or plutonium. Processing, utilizing spent fuel or handling, processing of type G waste. Those are all going to be excluded.
I will submit a copy of the insurance policy, the rider and I will submit a written report of what it is that is happening. And I think once something like this comes to light, you ought to let other people know. I don't think people are being educated about this. Any structure basin, evacuation, or place prepared or used for storage or disposal of waste.

So property damage includes all forms of radioactive contamination of properties. Thank you.

PRESIDING OFFICER: Thank you very much for coming.

We'll look forward to getting the copies.

KATHERINE MONTANO: My name is Katherine Montano, and I have live on Mother Earth. I am representing the Las Vegas Environmental Coalition.

The last EPA meeting that I went to, I told the Environmental Protection Agency of the United States that the Department of Energy has broken the law. And in the impact statement the WIPP Disposal Final Supplement Environmental Impact Statement Volume III, Comment And Response Document, this is what they printed -- but I said many things that were
of importance -- comments were made that DOE has broken the law by transporting nuclear waste on regular trucks, and some waste has already been moved to WIPP. And it's sad that when I did mention it, there's no feedback from the Environmental Protection Agency. And when
I saw the impact statement, this is their response. DOE has
moved some TRU waste between its facilities in accordance to
the U.S. Department of Transportation shipping regulations.
I did not accuse DOE of moving nuclear waste from
facility to facility. I know that they did announce in 1997
that they had moved nuclear waste from Texas to Los Alamos
Labs.
I think that's an injustice, and the reason I say
that is because New Mexico has been the sacrifice zone the
nation for the last 50 years. We have the largest
radioactive spill in the United States in our state. Los
Alamos Lab has grossly contaminated the ecosystem of the
state of New Mexico. They have found tatillium in the
Cochiti Lake. The Cochiti reservoir dumps into the Rio
Grande. The Rio Grande is also radioactive.
Here in Albuquerque they have found plutonium at
the zoo, at the university and many other parks and schools
because they fertilize with radioactive materials. Also, the
first atomic bomb was exploded on us.
Our people are dying of cancer. Our babies are
21 being born deformed, born brainless. We cannot afford the
22 nation's radiation.
23 Also, the EPA put out this on Radon. Yet I know
24 that radon is a natural release from the earth's crust
25 because we are high in uranium in our state. New Mexico is
sky high in radon. EPA says it should be a 200 picocuries per liter. In Las Vegas it's at 1,056 picocuries per liter.

In Taos it's over 2,000, and around the state it's just -- we're just overdosed naturally, and radon does cause cancer.

Getting back to the Department of Energy illegally moving nuclear waste to the WIPP site, they moved it in 1990 to 1994. We ran a petition and I got 6,000 signatures from my area, and I ran into three WIPP drivers. The route they were using from Rocky Flats was through Tres Piedras, Espanola and down to the WIPP site. They also came through Raton, through Las Vegas and down to the WIPP site.

These trucks went back up and it makes me sad because these drivers were not educated in how radiation affects their body.

I asked this driver, did they use special suits when they were moving the nuclear waste from your truck, he said yes. So I want you to tell the Department of Energy that they are liars and they have moved nuclear waste to the WIPP site.
In their response they say, the TRU waste TRU pack container is required only for shipment to the WIPP site. Well, that's bullshit because they were moving it on big regular semi trucks. They weren't using a TRU pack truck. Then they say, oh, no TRU waste has been transported to
dispose of or in place at WIPP.

Well like I say, I ran into three drivers and they all told me they were moving nuclear waste from Idaho, from Rocky Flats, and you know it is interesting that Pena used to be the mayor of Denver and they were pressuring to move the nuclear waste from Rocky Flats. Then he became the Secretary of Transportation.

If you check it out, you'll find that the Department of Transportation are the ones that financed the illegally moving of nuclear waste to WIPP. Now, it's interesting now he's a Department of Energy Secretary. So they are trying to cover their tracks.

It makes me sick that all of these drivers were never told of the danger that was going to inflict their bodies. The government right now should be paying for everybody's cancer in the United States, because they are the ones that have caused it. They say, oh, we're the super power. Well, you know what, when it came to nuclear waste, we're super stupid in what we've done with it.

All atomic activity must cease upon the earth.
There's no safe way of disposing of it, storing it, and nuclear facilities are making too much of it. This is the greatest crime to humanity and all life on the planet in the universe, and if you do honestly represent the people of the United States, it's time that you open up your eyes and your
ears and stop this project because it is a failure. We all
know it.

Also, the diagram at WIPP, this one right here,
this area up here, they call it experimental area where they
are going to put high nuclear waste. If you have do an
investigation as you should, this is where it is all stored,
those four years or however many years that they moved the
nuclear waste. Now this area is decommissioned.

The sad thing is that DOE goes around New Mexico
saying oh, we're just bringing you booties and tools and
uniforms. It's just equivalent to two x-rays a year. Well,
you know what, what they moved illegally is not booties and
tools because it took special equipment for those men to move
those drums out of those trucks.

So it is time that you as human beings start
protecting the people of the earth. God says in Revelations,
I will ruin those ruining the earth, so remember, it is on
your conscience and you are directing what is happening with
the nuclear waste of the United States.

All of the facilities around the United States are
grossly contaminated. All the ecosystems. It has gone out
into the ground water. If they want to close Hanford, we'll
probably have another Chernobyl. Are we going to wait for a
Chernobyl in the United States before you all do something.
And we're all worried about what Sadam Hussein is
doing. Send the U.N. into Los Alamos Lab. They were making
plutonium pits, the core, the mechanism for the nuclear bomb.
That is weapons of mass nuclear destruction. It should be
stopped because Los Alamos Labs continues to contaminate the
people of the state of New Mexico.

We are downwind from them, and when they had that
fire just because they come on a television and say, oh, we
didn't have a nuclear release, but yet everybody was sick.

People are dying of cancer in high scales. All of those poor
babies in Brownsville were born without brains.

When are we going to wake up? Please send the U.N.
into Los Alamos Labs. It is sad what is happening. And
remember, you are in positions to do something.

We're tired of 20 years of standing up here crying
and doing everything we can, worrying and worrying of what is
happening to the human race. You got to start listening and
stop the nuclear madness. It is out of hand.

PRESIDING OFFICER: Thank you for taking the time
to give your testimony.

KATHERINE MONTANO: I will give you this for your
records and I'll also give this so you can see the radon how
high it is in our state and many of the states. It has a map
here. You see this black right here, that's how bad the
radon is in our state.

Like I say, we have been the sacrifice zone for the

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nation for the last 50 years, and at one time it was top secret. Well, we don't like the secret no more and we want it stopped.

PRESIDING OFFICER: I think we have a copy of that.

I think that's one of ours.

KATHERINE MONTANO: Well, why don't you listen to what you write, that we are very contaminated in our own state.

PRESIDING OFFICER: Thank you.

KATHERINE MONTANO: Remember, we are a part of the United States.

PRESIDING OFFICER: Thank you very much. I appreciate it.

EDUARDO PABLO ZARAGOZA: My name is Eduardo Pablo Zaragoza. I am a native New Mexican and my concern about nuclear waste it that it is going to be transported into New Mexico and through New Mexico, is because no amount of radiation is safe. No amount of radiation is safe. I'm also concerned about the type of carriers that is going to be transporting this nuclear waste. Is it going
to be a private carrier or is it going to be a federal

carrier or a military carrier.

If it is a private carrier, they are going to be

required to stop at a port of entry where they will be

inspected by our state inspectors for safety and leakage of
containers and the condition of the driver. So if there's anything wrong, the inspector will be right there at the scene of the problem before it enters the state.

But if it is the military carrier, then these boats are not required to stop at the port of entry which bothers me now. They will begin the free ride through the state because they are not required to stop at the ports.

There will no inspection for possible leakage or bad equipment or drivers. We have a report of leakage load at Kingman, Arizona. Also, 15,000 metal boxes of radiation waste have been shipped from Vernal (sic) to Nevada test site since 1985. And they say that only eight boxes leaked before this week.

But leaky boxes were found in four of seven trucks that were sent from Ohio state site to Nevada in December 1997. The reason they claim these boxes have leakage is because of faulty welding seams. Plus the fact that there is no law enforcement agency in New Mexico that has the authority to stop and check these loads. So what action are we able to take if the federal carrier is leaking on our
We are worried. If terrorists unleash -- some of these highways are not more than 100 yards from high schools such as Bernalillo High School, Albuquerque high school, Belen high school, and an elementary school in Carlsbad.
These loads will pass by an elementary school. How are we going to protect the students from these schools if there is an accident? What kind of preparation has been done for safety and training of the students and faculty?

Other crucial questions involve where the federal loads will be stopped to rest and eat on our interstate highways. People must stay away from these trucks. We would like to know where the driver is going to be stopping so we can stay away. Five percent of the containers can emit 1,000 reams per hour. We have very little capability to prevent these containers from leaking.

Winter driving conditions on I-25 at the Raton Pass and La Bajada Hill are very hazardous as it is very steep downgrade, and one patch of what we call black ice cannot be seen. Guarantee the truck will be out of control.

Where are these loads going to be parked if the weather is bad and they can't get through. What precautions are done in case of accident along those hazardous driving conditions.

Are first responders trained for this type of
carrier, the answer is no. Our state's accident prevention
and response program are designed for the average accident.
This is a concern for all New Mexico port of entries, which
by the way, how will they be protected in case of a sniper or
terrorist attack? What kind of escort are they going to have
to protect themselves and us against this threat?

The containers by nature are of concern also. They have been -- the EPA has been testing three containers and out of the three only one is partly safe and is not designed to protect the public from the worst possible accident. Any container more efficient would be too expensive. This is not a time to be thinking about expense when human lives are at stake.

PRESIDING OFFICER: I'm sorry to interrupt. Your time is up if you could finish.

EDUARDO PABLO ZARAGOZA: These containers will be used over and over again. It's not like if these containers are going to be shipped to the WIPP site and disposed at WIPP site. They will be used over and over again.

I repeat, no amount of radiation is safe. The only thing worse than an atomic bomb is moving the waste from Point A to B, but that is exactly what we are doing with this WIPP project. Who's going to be responsible for the safety and protection of the people of New Mexico, and what power do we have to protect ourselves? Thank you.
PRESIDING OFFICER: Thank you very much for coming.

Is Ernest Garcia here?

(No response.)

PRESIDING OFFICER: Jeanne Carlston?

(No response.)
PRESIDING OFFICER: Lily Rendt?

LILY RENDT: My name is Lily Rendt. I have affiliation with many different organizations. They include -- it's on the front page of the packet I gave you -- American Society of Mammalogists, Audobon Society, World Wildlife Fund, Defenders of Wildlife, National Wildlife Federation and National Council of Teachers of Mathematics, to name just a few.

I have been in the wildlife business just about all of my life. What I'm presenting here in this, this packet that I gave you was supposed to be my speech to the laymen here in this facility. I have another one that I'm preparing which is on a mathematical statistical basis, which is about a higher level, but I have a summary and I'm going to read the summary. Anytime I have left I will deal with the packet.

PRESIDING OFFICER: Okay. We'll put your whole packet in the record.

LILY RENDT: Thank you. These are the points that I would like to make in regard to the procedures used by both
EPA and the DOE. I am not quite familiar who did what at

Now there are many aspects of WIPP, but the one I

am dealing with specifically is the one dealing with the

wildlife surveys which were done on the WIPP site or rather
the lack of follow-up of the surveys after about 1885 to 1889.

Up to that time, I see some integrity in the surveys. After that I do not. It is that which concerns me.

I think after -- I don't know exactly when Tell (sic) came into the picture. It is not stated anywhere when they began to assess the environmental biota on the WIPP site. However, I do know that these people came down from Washington. I think they knew little about our local biota. I don't think they had the concern for the biota that the people of UNM, New Mexico tech and Las Cruces had. And for that reason I am concerned about it.

I think that a lot has been passed up, a lot has been sort of fudged over, but even on the original surveys, I notice today -- I only got this information today at the EEG office, and I notice on a map where it said GEMN, that particular type of site with a little square on a map was when they were dealing with animals.

There were some that were done with flora which were quite adequate at that time, but the ones that were
dealing with animals were only in circle 1 of the WIPP site,
which is the immediate site, and that no work was done on any
intensive capacity on the sites that were on the outside
interior exterior of the immediate WIPP site and this
concerns me.
Now there were some very peremptory studies done with hawks, raptors and the raptor monitoring is somewhat adequate, but they don't include the kyte, and the kyte has a migratory path right through WIPP, which they missed entirely because of the times of the year when they were doing their studies.

Also, the loggerhead shruck. These are both raptors. They are small raptors, very small raptors but were ignored entirely, especially in the later scenario.

Now, I want to list in brief a 12 point summary the things that I noticed about the surveys and the way they were done. Misrepresentation of accepted biological procedures for environmental evaluation compared for teachers use by other groups of biologists. This is a specially true of endangered species surveys, and maybe illegal under federal law.

Waste of taxpayers money by printing and accumulating data that is worthless and is presented without proper clarification and interpretation. Lack of completion
and follow-up of data and being selective by using biota which corroborates a point of view. Deleting facts which do not favor data desired rather than investigating why it is present.

Confining surveys to such time of year as would
favor conclusions would fit preconceived results. Allowing Muscat (sic) to abdicate credibility levels which are unacceptable to the public and to other biologists. Lack of compensation for losses, road damage, loss of wildlife and endangered species, land withdrawals, radioactive contamination, et cetera.

If we lose something, we must be compensated for it. I think this lady over here said it too. If we must lose, then give us something in return. Misrepresenting data and not gathering vital data for the problem at hand and not supplying adequate literature and accessibility at designated reading rooms.

I went down to UNM and I wanted to get some biota data. There was none available. I went to EEG today finally and I found all kinds of it. Now that's not fair, because EEG wanted to throw me off. I went in there and I said I wanted to do something on biological surveys. She had biological surveys, she said there is nothing. I said, don't tell me there is nothing. I said, there is lots of data and I told her about some of the -- oh, she said oh, you mean

I told her about some of the -- oh, she said oh, you mean
ecological monitoring. What's the difference.

So she had to take my into the library and I got a little bit of information, but I had to come down here and so I didn't have time to really peruse it adequately.

Responding to public comments in a condescending
manner with negation and lack of understanding for the true
meanings being projected. Now this lady complained about it,
I heard it again and again, and I've looked at those
responses very thoroughly. I looked at my own certainly, and
it showed lack of understanding of what I was trying to say
and what I was trying to address. It negated the important
issues and it didn't deal with important issues on the
responses, and it dealt only with very superficial
interpretations of what was being said. Refusing to give
adequate time for an educated presentation unless the
presenter is connected to what the EPA conceives of as a
favorable organization.

Most of the people who are up here are stopped
before the end of the time. I happen to have ten minutes
today, but some of the people can't get it in five minutes,
and so they summarize their results until it looks inane.

I spoke to a man at EEG and he said I have to cut
down mine, I don't have enough time to give what I want to
give. This has been said again and again. I mean you people
are paid, we're not paid, we're willing to come down here,
give our time to give you information that we think is vital,

and you're not willing to listen for more than five minutes

at a time.

Rigidity in method when flexibility is called for

and too much flexibility when the situation calls for
consistency. Here are some examples. No changes in the acceptable levels for harmful chemicals through medical criteria, though medical criteria have changed rapidly and changing the purpose of nocturnal animal surveys to the Hantavirus without taking vital statistics about the animals trapped and studying.

Now all of a sudden there were no more nocturnal animal surveys. All of a sudden they were all geared to the Hantavirus. Well, the Hantavirus is important but the people working on the Hantavirus were Terry Gates and his crew at UNM, and they had nothing to do with the biological surveyors who were paid by WIPP to survey that land. They could have still done it and they could have used the Hantavirus data to get more comprehensive studies of the animals trapped, because they had one Silky Pocket Mouse for 1989, and I know there were more than one Silky Pocket Mouse on that whole big WIPP preserve in 1989.

Recruiting biologists from out of town at high cost and not utilizing the voluntary facilities within the state.

You have spent quite a bit of money doing the surveys,
supposedly objective, but not really objective. But we have
people within our state that are very, very reliable and
very, very honest with lots of integrity.
All three of our major universities certainly
have -- I've spoken to some of the people in Portales in
regard to the Armadillos, and they know what they are doing.

They know what's there and what's not.

Eastern is probably the closest to Carlsbad. It's just down the road, and yet it wasn't really done or no one was really consulted after about '89 except for the raptors and the nocturnal animals which were not really handled in an adequate way.

Now there's even some feeling for me that endangered species are not the only species around, but if we talk about endangered species, what about the Swift Fox? They have found skulls of Swift Fox on the WIPP site and they are not addressing the Swift Fox, which is a nocturnal animal. Why are they dealing only with mice?

There are so many discrepancies that I don't even know where to begin but let me read at least a little bit.

PRESIDING OFFICER: Ma'am, I'm sorry, your time is up.

LILY RENDT: Is it up? I wish I could say more.

PRESIDING OFFICER: Well, I say for you and everybody else, we'll put your written materials in the
21 record and we'll all read it.

22 I just wanted to mention to everybody that all the

23 material we get in writing, either at the hearing or after

24 the hearing, we read and pay as much attention to as whatever

25 you say here, so I hope, because we're stuck with these five-

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and ten-minute rules in order to make sure that everybody has
a chance to speak, that we're not limiting you.
Obviously you have a lot of information. We want
to get it and we will read it and pay attention to it before
we make the final decision.
LILY RENDT: The trouble is not everyone is
literary.
PRESIDING OFFICER: I think some of the people we
skipped earlier are here, but we've been going for a couple
of hours. We're going to take about a ten-minute break and
come back at say five minutes after 2:00 and start again.
(A SHORT RECESS WAS TAKEN.)
PRESIDING OFFICER: Let's get started again.
First now is Ernest Garcia.
ERNEST GARCIA: Good afternoon gentlemen, ladies
and gentlemen. My name is Ernest Garcia. I'm national
chairman of Contaminated Veterans of America. I have been in
a struggle endeavor trying to find resources to try to
alleviate the problems that we have picked up while in the
military.
I'm also a member of the Atomic Veterans. We're people who were used as experimental subjects during the cold war era and also participated as code operators. I myself am an ex-military intelligence code operator who myself disseminated and did many code operations both inside and
outside of the United States.

Since then, released from the Secrecy Act of 1996, after a terrific battle with Congress in Washington, we successfully succeeded. By that bell, so embarrassed became the United States that the president of the United States put together a committee of almost its entire cabinet to investigate the allegations of who was making them, and it was headed by Dr. Ruth Baten from the University -- well, you people are familiar with her -- University of I can't remember.

But anyhow, the question of your asking this committee over here in regard to the transporting of radiation through the state of New Mexico is one of what impact is it going to have on population over here. Being that we have such an enormous knowledge of what could be residuals of some incidental problems, I know the federal government's already made up their mind that it's going to happen and it's going to go through here.

We need to have some answers, some questions answered that I myself, including some of us that have
already been hurt by exposure to radiation so badly, is there
a way that the federal government is going to deal with this
incidents of all of these problems we're going to have,
because it's almost impossible that you can be running the
roads of New Mexico and not have these kinds of accidents
we're anticipating to have here in New Mexico that will
release some of this radiation that is so aggressive and
immediately become a problem.

Recently a driver, as you well know, from Missouri
to Las Vegas, Nevada was supposed to have been a driver, as I
understand -- we're staying on top of everything. I
understand it was actually the vehicle was loaded up with
some actual contaminants that we know, by fact and by our own
tests that the truck, since it left Missouri, the state of
Missouri, I think, it disseminated and released contaminants
all the way down to Nevada and still was releasing
contaminants when it went back the other way, that is went
back east.

We're concerned about this. Is it the federal
government making plans already to have an excuse why not to
respond to possible releases of radiation or what is it? We
would like to know. The reason for that is that it has
impacted me and my family and many of my colleagues so
terribly bad. We live such a terribly distorted life that we
need to know what is going to happen to me when those trucks
go right by I-40 right next to the populated areas of Albuquerque.

We would like to know whether this committee has some way that you're going to respond to us on all of these questions we're asking here on how it's going to be done. I
would like to have a copy of that response.

Let me give you a little synopsis of what radiation can do to a population. At least for myself, I myself have scars all over my body here. I have a radiated thyroid that I live with. I have a brain cancer in remission. I've had nine tumors been removed off of me. I've lost six children of eight children I've had. I have two children, and one of my children has had three children, two of them girls. One of them, 16 years old, has already developed cervical cancer.

The residuals of radiation goes on for five generations. That's as far as it will go. But I have a vested interest in what's going to happen in New Mexico.

We also know that New Mexico and the Atomic Energy Commission in the early parts of the development of the atomic bomb, did four detonations in the state of New Mexico. That's something that most people don't know, but I know because I was an intelligence -- now released. All of you know it's been done.

And New Mexico has become a state that it has been perceived as a state that everybody in here is expendable,
that we mean nothing. Everything that happens dirty happens in New Mexico. We would like to have some kind of time limit as to when it is going to stop or it's going to make it inhabitable at some time or another.

We, the Atomic Veterans, for example, we are
concerned about that. We would like Secretary Pena to
respond to the enormous amount of denials that you people
have put on this, and in spite of all these residuals I'm
telling here is that's what is going to happen if we have an
accident as the vehicle goes through the state of New Mexico
and releases all of these contaminants?
Do you have a standby plan by which we're going to
control how it going to happen? What is going to happen to
us? Do we know that?
Most of our people here and many of us are
illiterate. Many of us are remote out there. Many of us are
old. We don't have a plan to get out there and protect
ourselves from all of these problems. We need to know how
you are handling those things before you start moving this
stuff through our highways.
We want to know the routes you're going to take,
which people are going to be the most vulnerable. We
ourselves knowing what would happen and how to handle that
would like to be a part of this plan of trying to protect the
population as it goes out.
There's no way of trying to stop it because it is not going to be stopped. This is nothing more than a formality that's happening right here. Let's admit it. But what we want to know is what's going to happen if it doesn't? I think I said pretty much a lot of things. I
barely had ten minutes to introduce myself, but I thank you very much for listening, and I hope that you follow up. If you want my address, I would gladly give it to you so you could at least give a trip, because we have international connections if we want to disseminate this information. Thank you very much.

PRESIDING OFFICER: Thank you very much.

MR. MATTHEWS: Could I just make some comments. The point that you made with respect to this just being a formality, I think that I would like to clarify that somewhat, because I'm with the Office of General Counsel, and our office is separate from the Office of Air and Radiation which is actually doing the rulemaking. We provide legal advice and counsel to that office as they are doing their rulemaking. The agency has specific legal obligations in conducting the rulemaking of this sort and this is a very important aspect of that entire process, the gathering of comments, whether those comments are oral or whether the comments are written and submitted to the agency. And the
agency has to deal with all comments that are submitted in a very substantive fashion.

Part of my role, my job is to make sure that the office of Air is actually addressing those comments in a legally responsible manner.
A second point, a further clarification is that there's also recourse in the courts. If this is just a formality and if the agency doesn't take comments seriously, comments are raised, and I know comments had been raised by Mr. Hancock, we will receive comments later by Ms. Greenwald, by the Attorney General. If those comments are not adequately addressed and responded to by the agency, then the agency's facing a very real possibility of having any decision it makes overturned in the courts. So I really would like to caution you about considering this to be just a formality. It really is a legal process and the agency has to do its job right.

ERNEST GARCIA: Perhaps it was misquoted and I apologize for the way that you might have received it. It has been my experience before that on many, many occasions we make some comment of this nature to be updated and upgraded and so on, and we have been totally denied or actually not responded to. That's what I really meant, that I would like to have a follow-up on this thing at least for our benefit.

It wasn't my intention to downgrade you people as
to what your purpose was here, but rather hopefully it is not

a formality, if that's what you meant.

But I hope that it doesn't turn into a formality.

I hope it is as serious as it is serious to us. This is a

very, very serious thing to us, and I hope you take it as
such.

Please forgive me if you have taken it a different way.

MR. MATTHEWS: I didn't take it that way. I just don't want you to have the feeling that you're wasting your time here. This is not a waste of your time. This is a very important process.

ERNEST GARCIA: Well I hope not because we are immobilizing ourselves to really make it over here nationwide somehow to control the proliferation of all of these chemicals and also radiation releases that we can no longer tolerate anymore releases. Because we know from personal experiences, as you well do, that there is we're in the living tower.

PRESIDING OFFICER: If you would get us your name and address, we'd be happy to get back to you and we'll also connect you up with the right people here in the state of New Mexico and with Department of Energy and Transportation if you're dealing with transportation issues you raised.

ERNEST GARCIA: My information has been
disseminated to such an extent that I've gone on a speaking
circuit at several universities and also assisting the
federal government with some of the information that has been
destroyed through federal government, and I will continue to
do that, because I think it is important. And we have
information that is very, very valuable to you people. That.

We're here to make friends with you, not to make

enemies. We're together to try to solve a very, very serious

problem here. We want you to understand that. We need to

work together. We need to resolve the problem. Who will

take my name and address, the gentleman here?

PRESIDING OFFICER: Yes.

Is Jeanne Carlston here?

(No response.)

PRESIDING OFFICER: Is Joe Tilleison here?

JOE TILLEISON: My name is Joe Tilleison, and I

thank you for the opportunity to present my opinions here.

My background is in structural mechanics, that is

structures and what happens to them when you load them and

conform them. And I have worked for more than 15 years in my

career in developing and conducting experiments and designs

for the safe disposal of nuclear waste.

I work for and employed by Sandia Laboratories, but

I'm here today as a private citizen. My position is that an

effective solution has been developed and is here for the
safe disposal of significant portion of our nation's nuclear waste, and that the time is now for a positive decision.

There are four points that I will cover that I believe are particularly relevant. The first point is that effective regulations have been put in place to assure the repository's
performance. In attempting to conduct my own evaluations of
the sealing of the repository and simulating the rock
mechanics behavior of the salt, we continually ask ourselves
now what if we can beat the regulatory requirements. In
particular we've concentrated on those set forth for the
long-term performance of the repository.

By concentrating on the system requirements that
you have set forth for the repository, EPA promulgated in the
public arena a regulation that effectively limits the
potential exposure of our society to release this from the
repository. The releases allowed are quite low. In
addition, the probabilistic approach that you have mandated be
used requires consideration of a myriad of potential
scenarios for release. And finally specific factors related
to the WIPP site such as the fact that it's saline water in
the water bearing zones versus potable water, things like
that lead to very, very low releases and associated
consequences.

My second point is that a robust repository design
has been provided to you. From the perspective of long-term
containment of these materials, this WIPP repository offers many features that contributes to this robustness. First of all, it is within salt and I will not reiterate any discussions of the effectiveness of salt as a repository meeting.
Secondly rather than placing the repository at the shallowest depth, i.e., the cheapest solution available, the horizon was appropriately selected to provide several hundred feet of salt both above and below the repository to help form the cocoon to isolate the waste.

In addition, the repository was further designed to compartmentalize the waste with the repository in eight separate panels with seven rooms in each panel. Seals are provided between panels with exits and entrances to every panel to help isolate the waste.

And finally, techniques for sealing the shafts have been chosen that are exceedingly robust. Multiple commonly used materials are used with each one with low -- available technologies rather than new technologies were adapted at the WIPP to assure you really construct the seals.

Finally, the entire length of the shaft within the salt formation was used for buttressing, but it could easily be argued that shorter seals would provide adequate capability. These and other features made the design of WIPP very robust.
21 The third point is the conservative analysis
22 assured the performance of the repository. In the areas
23 where I have had responsibility, we have had numerous
24 discussions about how conservative do we need to be versus
25 how much exactly on target the analysis should be.
Invariably when you have slight conservatism or
even significant conservatism at each step along a process,
you end up with a system. I do not apologize for that.
Examples in my area of where we have used
conservative assumptions or in not taking credit for the long
term performance of concrete in the shaft seals. Similarly
no credit is taken for the radionuclide capability and
retardation capabilities of the plates within the seals.
That affect is that the provide an approach that's
appropriate, and height of assurance performance will be at
least as good as the performance that predictions indicate.
The final point that I make is that the process,
while it's been frustrating at times of multiple oversight
groups works. That process has given us technical oversight
by numerous responsible groups to assure the integrity of the
evaluations that have been put forth and put into your hands.
My first experience with that was in the mid 1970's
in testifying before the New Mexico Governor's Committee on
Technical Excellence. Numerous evaluations by the National
Academy of Sciences panel, my peer review by design
reviewers, et cetera, have been successfully completed, and
in recently years the EPA, your staff and contractors have
independently evaluated the work.

The net result of this has been continuous
improvements in the quality of the information used for
making decisions.

In closing I return to my original statement that I earnestly believe that an effective solution is here for disposal of a significant portion of our nation’s nuclear waste and the time is now for a positive decision. Thank you.

PRESIDING OFFICER: Thank you very much for your testimony.

Next is Roberto Ribal.

ROBERTO RIBAL: Good afternoon. My name is Roberto Ribal and I work with the Southwest Organizing Project. The Southwest Organizing Project is a community based organization. We're multi issue, multi racial. We're now starting our 18th year of work here in New Mexico. Our mission is to empower our communities to realize racial and gender equality and social and economic justice. This WIPP site is an issue of social justice for the communities of New Mexico.

New Mexico has long been the full site of the nuclear industry of the United States. The atomic bomb was
born in New Mexico, the U.S. government snuck into New Mexico to build a bomb. They came into New Mexico to mine our lands. They happened to be on Indian lands. Native peoples have been suffering for a very long time from the radiation. People have been dying of cancers and leukemias on the
reservations.

We see the old issues of transportation. All kinds of waste will be coming through New Mexico, through our major roads, through our major cities, through Albuquerque, Santa Fe, Roswell, through a lot of the cities in New Mexico. We see the full cycle here.

We even have a nuclear reactor at the university which is for the students to do their research on. Now you want to put all of this nuclear waste from around the country, and I believe it's even coming from outside this country, to put it here in New Mexico.

You come from back east in a lot of cases, the EPA is based in Washington obviously. There are a lot of people in this country that still don't know that New Mexico is part of the United States. People still forget that the United States stole this area from Mexico with the war against Mexico that culminated in 1848, when one-third of Mexico was taken from Mexico and put into the United States.

You people, it's your job to protect all U.S. citizens. We want to remind you that we in New Mexico are
21 U.S. citizens and we demand that you protect our environment.

22 Here we are again. I know personally I started

23 working with Citizens Against Nuclear Threat, as did other

24 members of our organization. We worked with Citizens Against

25 Nuclear Threat in 1976, 1977. We've been demanding that you
stop the madness here in New Mexico. Stop contaminating our soils.

Our organization has worked to empower communities. We are not an advocacy groups, we're not a technical assistance group. We empower our communities so that our communities can stand up for ourselves and speak and make our own demands that will benefit and protect our communities.

As such, our communities have been standing up for a long time against the nuclear industry and U.S. government, which is included with the nuclear industry to keep the full nuclear cycle here in New Mexico.

We stood up in the 70's -- down in Florencia, I remember going there. I've traveled thousands of miles fighting the nuclear industry and the U.S. government trying to contaminate our country, whether it be in New Mexico, Rocky Flats, we know the catastrophe that's happened to Rocky Flats. Whether it be at Yucca Mountain in the Western Shoshone lands in Nevada, we've been all over this country trying to protect our land from nuclear contaminations.

In Florencia -- I don't know if you know where
Florena is. Do you know where Florena, New Mexico is?

That's the original name of Carlsbad where the WIPP site is at. We're down there with our Chicano communities fighting to stop WIPP from going down there. We've stood with our native brothers and sisters on the reservations and in the
pueblos demanding that the tailings be dealt with, the
nuclear tailings be dealt with. Stop the mining until we can
get rid of the nuclear dangers.

We are concerned. We stand behind our brothers and
sisters in Santa Fe now who are fighting the transportation
issues, the nuclear waste transportation issues. They are
wanting to move the nuclear waste from Los Alamos down to
WIPP. Of course, originally the U.S. government had planned
to put a bypass around Santa Fe, New Mexico to keep the waste
from going through town. The bypass was to go through the
northwestern part of Santa Fe where I'm from, that's my home.

I played in the hills where they wanted to put that
bypass. Now it's been gentrified horribly, there are million
dollar homes. I can't even play there without getting
arrested now. But now all of a sudden with these rich people
in those areas, they don't want the bypass going through
their neighborhood because it's an issue of money for them.

They want to protect their investments, so where are they
going to put the transportation through, through Chicano
communities in the west side of Santa Fe.
21 We see this happening all the time. It looks like
22 New Mexico is being picked on at all levels because we are a
23 state which has a majority people of color. We're the only
24 state in the nation that is a majority of people of color.
25 As such, we see that's why we're being targeted.
We see ourselves as a colony of the United States. Our natural resources, our natural resources are taken, our human resources are taken. We are controlled by Washington and outside industries whether it be the Intel, whoever. We're really tired of it. I've been fighting now for 20 years and I will continue to fight for 20 more years or 40 more years.

My three daughters, I have raised them to understand a lot of these issues, and they will continue my work as well as a lot of other youth we have been working with for a long time. We're just getting tired of coming to these hearings at all levels.

You know, as I said, we empower our communities. We're not a group of scientists. We're not scientific experts and I might say that you aren't either. You've heard tons and tons of testimony for over 20 years showing how the WIPP site is unsafe. We support groups like Southwest Research and Information Center, CARD and other groups who have given you tons of testimony showing you how unsafe, scientifically unsafe the WIPP site is. And you
are empowered to protect our environment so please protect us.

As I said, New Mexico as a majority of people of color communities, we have seen our state being used as the dumping ground for this country. We have seen a lot of
issues of social justice not being supported or honored. We see that environmental justice is not happening for us. We see no justice here in New Mexico.

Our communities have long stood up to protect our environment. For people of color in the state of New Mexico, we sigh issues of environment as issues of social justice, and this is a large movement, environmental justice movement. If you're familiar, in I believe 1992, President Clinton signed executive order on economic and environmental justice, and they set up their principles of environmental justice. You are empowered to enforce those principles of environmental justice.

This WIPP site is a direct and flagrant violation of the principles of environmental justice, and we invoke those principles and demand that you protect our environment.

This isn't a political game for us. We don't stand to make money as others do. Sandia Labs, Kirkland Air Force base, Los Alamos, they make money off the nuclear industry. We don't. I don't get paid. I haven't been getting paid for 20 years to come and demonstrate to express my opinions and
21 trying to protect our state from the nuclear industry.
22 What we see is with environmental justice we see
23 the problems of deciding enforcement and regulation problems
24 that always negatively impact communities of color, whether
25 it be in Dallas, Texas. EPA has had different regulations
for the amount of lead being allowed into environment in
African communities, where in the white affluent communities
in Dallas they are much stricter. That's environmental
racism. We see environmental racism here in New Mexico when
you continue to dump in our communities of color.

Florencia was historically a Chicano community.

This wasn't part of Mexico, after all, so our communities
have long charged the EPA with environmental racism. And

racism is racism.

We charge the EPA with racism, and we demand that
you stop WIPP. Protect us from the DOE, from the nuclear
industry and any other people that want to dump these nuclear
wastes on our communities. Thank you very much.

PRESIDING OFFICER: Thank you.

Next is Ann Halter.

ANN HALTER: Thank you very much. My name is Ann
Halter. I don't come to speak to you today as an informed
person, but I am here as a concerned person. I think I
picked up on a solution about the actual WIPP site in the
half hour it's taken me to arrive here and walked from the
parking structure with a gentleman from DOE, and then sit
with a friend of mine who happens to do work in this area,

than I had known about WIPP, the actual WIPP site prior to
coming today.

But I'm here as a parent of two children. In my
professional life I'm an attorney and I represent children who are in abusive life system here in New Mexico, so I come from a perspective of having the sympathy and empathy and concern for children and other vulnerable populations. And I have to agree with some of the concerns expressed by Mr. Ribal, and I don't know but I've listened to what he had to say. An even though I, myself, am a transplant from the east coast and have chosen to make New Mexico my home, I can see that some of those issues are real issues.

When you have a state that has a population that is historically unempowered, native populations that have been stripped of many of their cultural and physical attributes by having their lands diminished, their languages wiped out, things of have nature, I think anyone who's empathetic an educated person, has to recognize that those are real issues for real people.

However, and many of the people that I know from the east do think that I have moved out of the United States, I think it is a good thing that our license plates say New Mexico, U.S.A. on them. And as a part of the United States
and citizens of this country, we have to take some part of
the responsibility for dealing with this problem of nuclear
waste that's going to be with us for generations beyond
counting.

I'm not going to speak about the technical aspects
of the waste site, because as I said I really had little
information about that. But as a member of the public, I
would urge EPA to use every means at its disposal to educate
the public. I think you're fighting against a history of
perhaps outright deception by the government about things
that have gone on in the nuclear industry, tests that were
performed without people's knowledge, accidents that happened
that were not revealed. Remedies that perhaps could have
been taken that weren't. That leaves people with suspicion.

It leaves peopel with some information but not full
information.

To address people's concerns I think you have to
take every opportunity to educate people about what the facts
are, not what some of the facts but what all the facts are.

As a mother, if there were a nuclear material
convoy traveling near my home, I would want to know about
that. I think what you need to use are materials that people
are used to paying attention to these days like video
presentations, call town meetings along the route and say
come watch this video so that we've tell you about the safety
precautions that we've taken, about what is going to happen if there is an accident. What you should do; what you should do with your children if there's an accident.

I think that there isn't any way that lay people can adequately inform themselves about the scientific aspects.
of the project and all the pros and cons, but I think
that if you treat citizens with respect, if you recognize
that their concerns are valid, and I appreciated Mr.
Matthews' comments that this is not just a formality, but I
think that if you look at it from the perspective of people
who live here, who have made this our home, who have nuclear
waste dumps virtually in our backyard, upwind, downwind
everywhere, there's bound to be a lot of anger about that, a
lot of confusion.

We had a gentleman stand here and show you scars
that he bears from government action. So address that up
front. Give people more information rather than less and
perhaps admit that we don't know all the answers, but let the
government, which is supposed to represent us all, has done
the best it can. Thank you.

PRESIDING OFFICER: Thank you very much. Those
were some good ideas. Louise Bower. Is she here?

(No response.)

PRESIDING OFFICER: Robert Hoffman.

ROBERT HOFFMAN: Mr. Chairman, member of the
committee my name is Bob Hoffman. I've lived in New Mexico

50 years. Forty of those years I've worked in the area of

economic development, having served as Secretary of Economic

Development of Tourism for the state of New Mexico.

In a directors meeting in Carlsbad 22 years ago, I
was there for the groundbreaking. I'm surprised the project
is taking this long, to tell you the truth.

As soon as visitors were allowed, I went back to
Carlsbad, I toured the site, heard the presentation and was
very impressed with the safety factors that have been taken
in the building of WIPP.

I came back and told our members I now serve as
head of a group known as the Economic Forum, which is 100
chief executive officers in Albuquerque, and we have
operations in most cities in the state.

The companies employ over 100,000 New Mexicans.

We've had two presentations from Westinghouse in relation to
this project for a group. And I took a majority of our
people down to Carlsbad about three years ago, had
presentations, took a tour of the facility and the group was
really impressed with what they saw.

After hearing the presentations and going down and
seeing the facility in person, came up with the following
resolution:

The Albuquerque Economic Forum recognizes the
importance of the long term and safe storage of materials

used in the manufacture of nuclear weapons, and the

Department of Energy has created a repository for this

material at the Waste Isolation Pilot Plant in Carlsbad, New

Mexico, and this material consists of large volumes of
typical manufacturing materials contaminated with radioactive compounds, and the Department of Energy and Sandia National Laboratories have studied and characterized the Carlsbad site for its suitability for storing this material safely for a period of 10,000 years, and the studies leading to these conclusions have been conducted over a period of 22 years and have been supported by experiments in the actual waste disposal area, and with EPA and the State of New Mexico approval, waste can start to be stored at the WIPP site starting May 1998, and opening WIPP assists in cleaning up nationwide problems in sites contaminated with radiation.

Now therefore, be it resolved that the members of the Economic Forum unanimously support approval of the WIPP for storage of this material starting in May 1998.

Thank you.

PRESIDING OFFICER: Thank you very much.

Next is Pat Tyrell.

PAT TYRELL: Good afternoon. Thank you Mr. Wilson and members of the committee. My name is Patrick Tyrell and I am Executive Director of the National Association of Social
Workers in New Mexico. We represent about a thousand social workers throughout the state.

No profession is more aligned with the protection of children than is that of social workers. We have long been associated with being involved with protecting abused
and neglected children, recognitions those children who are a
threat of abuse and exploitation.

We have been strong advocates in terms of child
welfare and have had many achievements in that process along
in representing our nations most vulnerable population.

It is because of this role in terms of protection
and adequacy as far as children are concerned that we state
our opposition to the WIPP project.

The WIPP project constitutes a form of child abuse.

In the sense of a potential hazard and accident that may not
occur this year but may occur well beyond our own lifetime, I
am particularly disturbed in terms of looking at the accident
potential, the lack of safety standards in terms of what this
means for our children -- not just our present children but
also for future generations of children.

It also very much disturbs me that in this whole
decision making process that children are not -- do not seem
to be involved in the decision making process. We as adults
are somewhat affected by this decision, but clearly when you
look at the long range potential, it is our children and the
future generations of children who will be most seriously
affected, and that doesn't seem to be involved or addressed
in this whole decision making process.

Until we are able to bring in that group, the most
vulnerable in this process and to make sure that they are
adequately protected in this process, we will continue to be opposed to the WIPP project. Thank you.

PRESIDING OFFICER: Thank you very much.

Next is John Carley. Is Mr. Carley here?

(No response.)

PRESIDING OFFICER: Dr. Dan Kerlinsky.

DR. DAN KERLINSKY: My name is Dr. Dan Kerlinsky.

I represent New Mexico Physicians for Social Responsibility with 100 physicians in New Mexico and 10,000 nationwide.

Our group is against opening WIPP until all the environment, health and safety issues related to waste handling, packaging, transport and storage have been resolved. We do not feel that the issues have been adequately addressed at this point.

Despite decades of concerns about major water intrusion into the WIPP site, the major release scenarios have not been adequately analyzed. Water flooding, drilling, gas or brine intrusion must be better analyzed and better mitigation measures must be developed. The possibility of catastrophic failure at WIPP with the release of 100,000 to
millions of curies is still present.

Tens of thousands of gallons of fluid injection from oil drilling can move laterally into the site from outside current boundaries. The boundaries of the WIPP site should be significantly expended to prevent drilling on a
I remain very concerned about the emplacement of any remote handled waste at the WIPP site. After years of reassurance that WIPP waste would be comparable to low level waste and radioactivity. This represents a severe breach of public trust. There's no reason to put extremely dangerous waste that cannot be handled directly into WIPP. Should difficulties ensue in the generations ahead, this extremely hot waste will complicate efforts to get back into rooms if needed for mitigation efforts for repackaging, and the indoor air that's going to be present in the future if we have to go back in, and we'll have some very significant problems. PSR remains unhappy about the decision not to shred, route and repackage all the waste. The best way of reducing the likelihood of human intrusion into the site is to lower the human interest in what will be found. Current barrels filled with clothes and tools of the 20th century will be a gold mine for future archaeologists. What archaeologist today would not dig up and open every last
barrel if an Anasazi site was found?

Shredding the materials would also handle problems

with gas generation, reduce risk of handling and

transportation and give us decades of retrievability should

problems or better options develop. No one should have to
handle rusty barrels containing toxic waste.

Onsite storage alternatives for TRU waste have not been adequately developed, even though the SEIS concludes it is safer to leave waste where it is at the various DOE sites. EPA will be reminded of this thousands of times as the transportation begins on local opposition mounts. Lawsuits may force judicial consideration of whether or not DOE's preferred alternative is really a legal one, if it is really safer to leave this waste on site.

The increased time costs and handling necessary to shred, grout and repackage waste may even be advantageous as it will enable more aboveground alternatives on site to be explored.

Storing, shredded, grouted and repackaged waste in new above ground buildings on site is the wisest choice at the present. A collapsing waste site with corrosive materials should be a joke. Who in their right mind would bet everything geological containment without any other barriers to release? A collapsing waste site for corrosive materials for extremely long lived waste, we may become the
laughing stock of the 23rd century with this plan.

PSR calls on EPA to take its mission seriously and not give in to political pressure from other administrative agencies or legislative representatives. Is the interest of the people that must be served. Thank you.
PRESIDING OFFICER: Thank you.

Next is Victoria Michelle. Is she here?

(No response.)

PRESIDING OFFICER: Paul Rueckhus.

UNIDENTIFIED SPEAKER: He had to leave.

PRESIDING OFFICER: We'll watch out for him.

Maria Baca.

(No response.)

PRESIDING OFFICER: Don Schrader.

DON SCHRADER: I grew up on a farm in Illinois. I was a Mennonite pastor in the 1960's. I first moved to Albuquerque in June 1970 as a conscientious objector doing alternative service during the Vietnam war. I hosted a weekly TV program here for over five and a half years. For 19 years I have paid no federal income tax because I refuse to pay for Uncle Sam to rob, to torture, to murder millions worldwide.

The U.S. is five percent of the world's people and consumes over 30 percent of the world's wealth. This is a monstrous, outrageous crime against the world's poor.
Years ago I was spoiled rotten, but with the help of many people I woke up and I changed. What right do I have to more than I need while hundreds of millions suffer desperately on far less than they need. I lived well this past year on less than $5500, considerably below the U.S.
I'm a vegetarian. I exercise much. I refuse to own a car. I'm devoted to the golden rule, treat others as I want to be treated.

I strongly oppose opening WIPP. WIPP is about making it possible for Los Alamos and other U.S. death factories to continue to build weapons, to maintain, enforce and expend the U.S. empire to keep hogging the wealth of the world. That's what it's about.

WIPP is about aiding and abetting international terrorism by U.S. nuclear weapons. Do you in the EPA deep down in your hearts believe that the DOE has told you the truth, the whole truth and nothing but the truth about WIPP? Do you believe beyond any reasonable doubt, beyond any reasonable doubt that it is safe for the next 10,000 years? You know, we look back what, 500 years ago plus in Europe, how many people actually believed and the scholars there believed that the earth was flat. Now, we see how wrong they were.

Will scientists, if there are any people alive, 500
years from now, 5,000 years from now, look back and say, how
could educated people be so ignorant about such deadly
poison? How could they risk the future generations?

In yesterday's Albuquerque Journal, a front page
article says, the recent earthquakes in central New Mexico
puzzle scientists. Think about that. Despite modern
computers and seismology equipment and many years of
earthquake research, scientists today are puzzled by these
recent earthquakes in central New Mexico.

Do you think it impossible that major earthquakes
could happen around WIPP and cause large pressurized releases
of radioactive brine once or many times in the next 10,000
years?

Just months before Three-Mile Island catastrophe,
what did the highly paid government and industry experts say
publicly about the safety of Three-Mile Island? What did the
highly paid government and industry experts tell the public
before these tragedies: Rocky Flats, Savannah River, Valdez
Oil Spill, Chernobyl, Texaco in the Amazon, Hanford,
Washington, the Challenger, the Titanic.

The experts have demonstrated their stupidity and
their arrogance repeatedly and have lied routinely. What
right do I have to leave this earth more poisoned at my death
from my selfish consumption than what I found it at my birth.

Consider the scientific discovery and the global
environmental changes that have occurred in the past 100 years. What fool would presume to predict reliably what will happen in 10,000 years, which is 100 times 100 years?

Spend some days with one child, just one child whose body is severely deformed from birth. Spend some days
with one child permanently retarded from birth. Spend some
days with one child languishing for years in cancer's misery.

WIPP, if it is opened, will be responsible for
children suffering these tragedies, no doubt about it. The
unanswered question is how many children will be WIPP'S
victims in the next 10,000 years.

And then in our society many adults wonder why some
kids have no shame, no guilt, no remorse for drive-by
shootings.

When Gandhi was asked what worried him the most, he
replied the hardness of heart of the educated. Education is
not the answer to our world problems. A compassionate,
empathetic imagination is.

A Jewish Rabbi in Nazi Germany said what shocked
him most was not the terror of the Nazi, but the silence of
the good Germans. You know there were many Germans who
supported the Nazi Concentration camps and gas ovens because
these handsome ovens provided jobs. And we say how could
they have been so morally bankrupt. It's obvious. All we
have to do is look at this.
Einstein said more and more I have come to value charity and love of others above everything else. All our lauded technological progress, our very civilization is like an ax in the hands of a pathological criminal. All our lauded technological progress, our very civilization is like
an ax in the hands of a pathological criminal.

PRESIDING OFFICER: Mr. Shrader, your time is up.

DON SCHRADER: May I have one minute?

PRESIDING OFFICER: Sure.

DON SCHRADER: Why have even the government experts

original requirements for WIPP been set aside? Number one,

far away from major rivers and streams.

Two, water a factor to be guarded against no matter

what it's source, and the truth is there's water in the

strata above and below the WIPP site.

Number three, no area with a present or past

history of resource extraction other than service quarries.

All of this has been set aside. If we urge kids to

say no to dangerous drugs, have we no right as New Mexico

citizens to say no to the money mad pushers of deadly

radioactive waste shipped on our highways, through our

communities to be buried in our sacred soil.

Would you personally recommend your children, your

grandchildren to live next to WIPP and next to the highways

where this radioactive poison will be shipped?
All of us here today will be rotting in our graves within the next 100 years. 10,000 years is 100 times 100 years. I refuse to be among those cursed by the coming generations for selfish, shortsighted, greed driven, stupid support for the premeditated random murder and misery to be
caused by WIPP.

Are your jobs, your income to push WIPP worth more than health and well being of the children that come after us? Have you sold your conscience?

Store this deadly radioactive poison on site where it was generated, monitor it carefully, and make no more.

PRESIDING OFFICER: Thank you Mr. Schrader for that testimony.

Geraldine Amato.

(No response.)

PRESIDING OFFICER: Gil Brassell.

GIL BRASSELL: Good afternoon. I'd first like to start by saying that if we had no nuclear waste in this country, we wouldn't be to talk about it. But as we all know, thre are hundreds and hundreds, maybe even thousands of pounds of nuclear waste scattered all over this country. Not just here in New Mexico but everywhere all over the country. So as a result of that we're here trying to decide which is the best and safest method of handling this problem.

I'm Gilbert Brassell. I am the president and CEO
of Nuclear Filter Technology, a small minority company located in Golden, Colorado. I grew up in Santa Rosa, which is about 100 miles east of here, and I presently have family and friends still living here. I attended the New Mexico Highlands University,
received a Bachelor of Science Degree in Chemistry. I
received a Master's Degree in Material Science and
Engineering from the University of New Mexico here in
Albuquerque, and I started my career.

I spent the first 15 years of my career working at
three different DOE facilities. All of these facilities, I
traveled extensively to every DOE facility in the country.

As a result of this, I'm very knowledgeable and aware of the
serious problems we face as a nation regarding our nuclear
waste and stock pile.

The problem we have is not a local issue pertaining
only to the waste or the sites where the waste was generated,
such as the Los Alamos National Labs, Sandia National Labs
and all the other facilities around the country. This is a
national issue. We as a nation must work jointly to solve
it.

I founded my company based on filtration
technology, which is now being utilized for safe storage and
of nuclear waste materials. Without the use of our
filtration device, containers could possibly become
pressurized and cause potential problems.

The use of this device is only one of the many safety precautionary steps being implemented by DOE to insure the health and safety of the workers and to the public.

Other methods used to insure safe transportation of
stored waste include complete characterization of every
container of waste. Each container must meet strict
requirements imposed by the Department of Energy, the EPA,
the NRC and the Department of Transportation.

Any shipment to WIPP before it occurs must pass all
of these strict requirements. Based on my knowledge of the
industry and all of these safety requirements imposed, I
firmly believe that the transportation and storage of the
nations TRU waste to the WIPP facility is very safe and
should proceed without further delay. Thank you.

PRESIDING OFFICER: Thank you very much.

Next is Judy Kaul.

(No response.)

PRESIDING OFFICER: Steven Melzer.

STEVEN MELZER: Good afternoon. I appreciate the
opportunity to speak on the issue related to CO2 flooding of
Science and Engineering from Texas A&M and a Master's in
Engineering from Purdue.

Through my duties with the University of Texas
Permian Basin, I've been actively working in the CO2 flooding
area of the Permian Basin. I've been assessing the future
the CO2 enhanced or recovery in the basin, and have conducted
reservoir screening studies of attempting to characterize
floods and identify the location and attributes of reservoirs
and the likelihood of CO2 flooding.

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Much of my work recently has attempted to project basin wide the position of the CO2 supply and to forecast oil production from existing in future CO2 floods. It is in this capacity that I will offer a view of how the sandstones and siltstones of the Delaware Basin Fields near the WIPP site rank in probability landscape, that is, how they compare to successful and ongoing projects currently under way and more distant from the WIPP site area.

From there we will travel to the issue of likelihood of implementation of CO2 flooding near the WIPP site. First let me say it is very appropriate that CO2 flooding be examined. CO2 flooding is becoming a major factor in the production panorama of west Texas and southeast New Mexico. Today we estimate 140,000 barrels of oil a day are produced as a direct result of the injection of CO2. This figure represents 50 percent of the total production of the basin. It is up from just 110,000 barrels a day four years ago. Based upon a recent survey of operators, I project production to grow to over 165,000 barrels a day by 2002.
CO2 flooding industry is relatively new. The first
CO2 floods were implemented in 1972, and today they are 44
active flood projects. There’s a $1.2 billion pipeline
infrastructure that has been constructed just for CO2
flooding, and it now delivers 1.5 billion cubic feet of CO2
gas to each day to the Basin's flood. If you assign this CO2 a delivered value of $.75 per cubic feet, that volume of CO2 represents a billion dollars being injected into our reservoirs every few years.

The ancient Permian Basin region can be characterized as two smaller basins separated by a carbonate reefal platform shown in the outline in black there. The Delaware Basin is on the west, you see the WIPP site and the Delaware Basin and the Midland Basin on the east. The Central Basin platform is the location of the vast majority of the floods. It is here that the Permian age San Andres dolomite reservoirs near Denver City, Hobbs and Levelland have been produced since the 1930's. The WIPP site lies west of the Central Basin platform and the rocks differ from those of the platform in being predominantly sandstone and siltstone while the platform formations are predominantly dolomite.

Thirty-two of the 44 active CO2 floods are dolomite reservoirs. Five more are limestone reefal rocks. Those are predominantly those on the east side. Only two active floods
are in the Delaware Basin. You see four on the map but just

two of these are actively injected CO2. All of these

sandstone floods lie south of the WIPP site, just into the

state of Texas.

Next it is important to make an assessment of what
is known as the WIPP area field. These fields are siltstone reservoirs of the Delaware Mountain, Cherry Canyon and Brushy Canyon formations. They typically produce less than one million barrels of oil from anywhere from one to 12 wells per field. The reservoir thicknesses generally are less than 30 feet.

Finally it is relevant to compare the WIPP area reservoirs to those being flooded today and to assess the possibility of development. The Permian Basin leads the world in CO2 flood development with more active floods combined. The vast majority of the floods are carbonate. I believe the reason for this are three: The large size of the carbonate fields, the thick oil columns, and the vertical and lateral continuity of the reservoirs themselves.

PRESIDING OFFICER: Mr. Melzer, your time is up, so if you could wrap it up.

STEVEN MELZER: What we've got on this second and final slide is a balance sheet of the factors that I believe will affect whether or not the areas of the floods be developed. Positive factors you can read, we are in the
middle of a future growth area of floods, but the negative
factors are long and in essence we've got several issues that
I don't believe the industry will be able to overcome.
The biggest of those is the smaller reservoirs and
the unproven reservoir sweep. So it is a very expensive
proposition to put in a CO2 flood, and the risks of an
unsuccessful flood still haunt the industry. Since the WIPP
area reservoirs are small, channelized and target oil
reserves in less than a million barrels, what we are left
with is a conclusion that CO2 flooding of the WIPP area
reservoirs is unlikely. Thank you.

PRESIDING OFFICER: Thank you very much.

MR. MATTHEWS: I'm curious, are you going to submit
a more detailed written statement on this issue?

STEVEN MEZLER: Yes. Actually we've authored a
report that should become part of the general procedures.

MR. MATTHEWS: That would be very helpful. I have
a general question. It struck me as somewhat interesting.
Could you provide a little bit verification, more information
on why that the Permian Basin in CO2 floods is more active
floods than anywhere else in the world combined?

STEVEN MEZLER: Well, several factors are involved
there. The maturity of the basin is clearly most important.
This is a tercury or recovery mechanism and it follows a
primary production phase in which uses the reservoir energy
itself to produce the oil.

Then the water flood where water is injected and swept to the producing wells. And then thirdly, which right now is lastly, is CO2 injection which gives another ten percent of the oil beyond what the water would have gotten.
So reservoirs are essentially a state where we need
to either produce turcery methods before we abandon the whole
oil field. The other factor which is important is we have
the local source, a nearby source Bravo Dome in northeastern
New Mexico is it a good source of CO2. And that's another
reason co2 will continue to be used because of the area wide
sources.

MR. MATTHEWS: Okay, thank you very much.
PRESIDING OFFICER: Ted Cloak.
I'm going to check while you're coming up. Is
Jeanne Carlston here?
(No response.)
PRESIDING OFFICER: Louise Bower, Geraldine Amato
and Judy Kaul.
(No response.)
PRESIDING OFFICER: Go ahead.
TED CLOAK: Good afternoon. I'm Ted Cloak. My
Doctorate is in Cultural Anthropology, and I'm an analyst
programmer retired from the University of New Mexico.
As a scientist I'm appalled that the EPA is
accepting anonymous research reports from the DOE. As any
researcher should know, scientific work is public work. Not
only should results be subject to review by qualified
colleagues, but the credentials of the author or authors
should be available for verification.

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Since we don't know who the authors of the DOE reports are, I believe we have license to speculate. I speculate that the authors are not geologists at all but economists. Like the DOE authors and unlike other scientists, economists are in the habit of assuming unlikely conditions, assuming perfect competition. Assuming an infinitely extendable economy, assuming the absence of environmental externalities, and assuming only rational actors.

The DOE reports, for example, assume that oil drillers 500 or 1,000 years from now will scrupulously obey the current laws of New Mexico. Neanthropologists know that ill behavior, at best, only approximates ideal behavior. The reports assume that drillers will never make mistakes.

We analyst programmers know that the only reliable law governing the outcome of human endeavor is Murphy's Law, whatever can go wrong will go wrong at the worst possible time.

We all know that in the future human beings will be strongly motivated to drill down through the WIPP site. We
know that human beings invariably make mistakes. We can
deduce this with practically 100 percent certainty that
within far less time that the required lifetime of WIPP,
human activity will release radioactive material at the
surface and into the aquifer.
The greatest danger from WIPP, however, is that in an entirely different scale. If you approve WIPP with all of its dangers and flaws, you will be telling the world that the problem of nuclear waste disposal has been solved. That governments and industries have a green light to develop and produce nuclear energy and nuclear waste. This will surely lead to one too many WIPPs; one too many Three-Mile Islands; one too many Chernobyls; and God help us, one too many Hiroshima's.

In truth, you are being asked to make a decision that affects far more environments than just that of southern New Mexico.

In sum, I'm begging you to rethink your decision to approve WIPP and this time to include the all too human capacity for error in your calculations. If you do, I think you must conclude there is no environmentally safe way to use nuclear energy on an industrial scale.

WIPP is dangerous in its own right and multiply dangerous as a harbor of things to come. Thank you.

PRESIDING OFFICER: Thank you Mr. Cloak.
21 Next is Victoria Michelle.

22 (No response.)

23 PRESIDING OFFICER: Dr. Matthew Silva.

24 DR. MATTHEW SILVA: There are copies of my material

25 in the back of the room as well.
Thank you for the opportunity to provide input on future resource exploitation of air drilling that might be anticipated for the Delaware Basin surrounding the WIPP site.

My name is Matthew Silva. I hold a Master's Degree in Petroleum Engineering from New Mexico Institute of Mining and Technology and Ph.D. in Chemical Engineering from the University of Kansas. I've been employed by the Environmental Evaluation Group since 1990.

If I may comment at this time, also there will be two other EEG presentations tomorrow, one by Dr. Chatervedi at 9:25, and one by Dale Rucker at 10:45.

PRESIDING OFFICER: Okay.

MATTHEW SILVA: WIPP is located in a resource rich area that is rich with oil, gas and potash as shown on the map. The EPA has set limits on how much of the radioactive inventory can leak out of the repository and into the surrounding area over the next 10,000 years. EPA also requires that the scenario of inadvertent drilling into the repository be considered. However, the DOE analysis of future drilling scenarios is limited to the assumption that
any future drilling must bring or drilling mud as a drilling fluid. It does not consider the use of air drilling or other light weight fluid drilling methods despite DOE's own published optimist forecasts for this expanding technology.

John Bredehoeft is a member of the National Academy
of Engineering, a former number of the NAS WIPP committee,
and a recent recipient of the prestigious Penrose Medal from
the Geological Society of America. His recent report shows
that the release of radionuclides, as a result of intrusion
by air drilling, will exceed the allowable release limits.
The report has been questioned on two fronts by DOE. First
Dr. Bredehoeft recognized the limitations of using the GASOUT
code in his calculations. He clearly identifies those
limitations in his report. Second, is underbalanced
drilling, that is drilling with air, gas, aerated mud, foam
or mist replacing conventional drilling fluids in the oil and
gas industry. Well, that's what I want to talk about today.
Underbalanced drilling is considered emerging
technology that is well suited for drilling in aging oil
fields or through sensitive reservoir zones, which would
otherwise be considered nonproductive. The advantages of
underbalanced drilling include increased rate of penetration,
minimal formation damage, more complete removal of cuttings
for improved bit performance, and every effective cooling to
extend bit life.
Based on its own recent studies, the DOE has projected strong growth for underbalanced drilling for oil and gas in the United States. And as you can see from their projections, they indicate that use of underbalanced drilling for 1994 was less than 2,000 wells and by the year 2005 it
will be close to 12,000 wells.

The DOE estimates also that by the year 2005 anywhere from 25 to 37 percent of the oil and gas wells drilled in the United States will be drilled with light weight fluids, such as air, mist or foam as published in the Oil and Gas Journal.

Although underbalanced drilling is not being widely used in the Delaware Basin, the future use of such technology should not be dismissed. For example, the DOE cites the drilling experience of one contractor in the Hugoton (sic) field in western Kansas. The reservoir pressures in the field had declined to the point that light weight drilling fluids were needed to prevent formation damage. According to the DOE study, the number of foam units in use by that contractor grew from none in 1988 to 15 units in 1994.

The DOE stated that air drilling has not and will not occur at the WIPP. However, the DOE also long argued that there were no crude oil reserves in the vicinity of the WIPP. Yet by 1991 the WIPP site was ringed with drill rigs sinking wells for the production of known crude oil reserves.
21 Nonetheless, the project continued to maintain that crude oil
22 will not be a target for exploration unless the price of oil
23 rises to levels substantially higher than the produce during
24 the past energy crises. Also natural gas in the Morrow
25 Formation will remain the main and perhaps only hydrocarbon
of potential economic importance.

I think this indicates pretty clearly the growth of the oil production from the Delaware Basin in the 1990's.

As another example, the EPA maintains there are no natural gas storage horizons in the Salado Formation. Yet record on file with the State of New Mexico show that there are eight documented underground storage facilities in southeast New Mexico, three of which are in the Salado Formation and which were created by washing out the salt.

Two of those have been operating since 1953 and are still in operation.

Given the observations discussed above, the concern raised by Dr. Bredehoeft needs to be expanded to include the use of other low density drilling fluids such as aerated mud, foam and mist. In light of the DOE Office of Fossil Energy's optimistic assessment of the expansion of underbalanced drilling for oil fields in the country and other factors discussed above, it would seem prudent for EPA to require or conduct an appropriate consequence assessment of the impact of drilling with air, aerated mud, form and mist on the
release of radionuclides from the repository. Thank you.

PRESIDING OFFICER: Thank you for your presentation.

We're a bit ahead of schedule, so we'll take a break in a few minutes. Let me see if I can get one or two
of the people that signed up today in.

Lyndia Spurling.

(No response.)

PRESIDING OFFICER: Amy Nixon.

(No response.)

PRESIDING OFFICER: Jenny Van Winkle.

(No response.)

PRESIDING OFFICER: Pat Terrell.

(No response.)

PRESIDING OFFICER: Penny Maynes.

(No response.)

PRESIDING OFFICER: John McCall.

(No response.)

PRESIDING OFFICER: John Dimas.

(No response.)

PRESIDING OFFICER: Don Kimball.

DON KIMBALL: Hi, my name's Don Kimball. I'm here today to tell EPA that New Mexico is not the sacrifice zone.

I'm totally against what WIPP stands for and I think it is in environmentally, ethically and economically wrong. There are
so many reasons for it, and many of those reasons you've 

already heard from people that are much more knowledgeable 

about WIPP than myself. 

I don't want to see EPA rubber stamp this WIPP 

project simply due to political pressure. Our Senator Pete
Domenici, we know put political pressure on EPA to move this project forward.

Since President Clinton came into office and made the Environmental Protection Agency and a cabinet member, I figure that EPA was on the side of truth, justice and the American way, even though it sounds a little bit trite, but I think EPA should be impartial.

Mr. Wilson, I saw you on TV last night on Channel 7. I did not feel that what you said to the press was impartial at all. I thought that it sounded like you were a mouth piece for WIPP and for DOE. Now, that may not be the case, but that's certainly the way it came off.

I think EPA has an obligation to the people of New Mexico, the United States and indeed the world to make sure that DOE does the right thing. The right thing is not to have WIPP.

Can we trust DOE? We have heard from people here who are experts that DOE has accepted testimony and scientific evidence from people who remain nameless. There's no credibility there. DOE has no credibility. EPA in my
mind still has credibility and EPA should maintain that
credibility and insure DOE does the right, and the right
thing is not to have WIPP.
If we could go back to the 1940's starting with
things that DOE had done, they are just too numerous to site.
And when I say things that are done, I'm talking radioactive waste being perpetrated on the people. School children that were given radioactive material that was put in there breakfast cereal to see what the effects would be. This is madness. This is absolute madness.

Now here's O'Leary herself before she retired from DOE or left DOE, I don't know which it was, but she left. She personally apologized to the American people for some of the things that have been perpetrated on the American people because of DOE. DOE cannot be trusted.

EPA has to make sure that DOE that does the right thing, because DOE will not do the right thing. It's been proven time and time again.

Last year there was an article that was published, and it talked about radioactive fallout from the Nevada test site that made children who were born in the years 1951 through 1952 -- which I'm a member -- susceptible to radioactive fallout, and I forget what the element was but it was radioactive. But it got into the milk supply of this country. That was intentionally done.
Now these people at DOE knew about this. It spread all over the entire United States. I'm sure some of these people from DOE knew that some of their relatives were going to be poisoned with this. They didn't care. They are an agency that is out of control and they need to be reigned in.
You people are the only people, as far as I can see, that are going to do that, so we ask you, we beg you to do the right thing. Make sure that DOE does the right thing. Stop WIPP. Keep the contaminants on site.

I brought an article with me that's from the Albuquerque Journal that was from December 19, last year. The headline is "Nuclear Waste Shipment Was Leaking." Okay, there's radioactive material in the cargo that leaked but DOE says there was no radiation from it. This is a primary example. These people are always going to say there's no radioactive contamination.

The highest law enforcement official in New Mexico, Attorney General Tom Udall is adamantly opposed to WIPP. A quote from him in this article is, all the representatives from the DOE on WIPP is how safe it is, Udall said. Here's evidence that they can't even deal with low level waste and we're talking about plutonium contaminated waste which is destined for WIPP. I'm very disturbed by this report. We cannot let DOE shove this project down the throats of the people of New Mexico. It's up to you folks to take
21 responsibility to make sure they don't.

22 In closing, if we as New Mexicans refuse to rise up

23 and stop this if it does go through, maybe we deserve what

24 we're going to get if WIPP goes in, but it's for sure the

25 future generations will not. Thank you.
PRESIDING OFFICER: Thank you. You mentioned -- raised the TV interview which I didn't see, so I'm not sure exactly what quotes were raised, but since many people are here who weren't here this morning when we started the hearing and I tried the give a little background.

The responsibility that Congress gave EPA in this WIPP issue to establish the radiation protection standards for the site and to assure that the plans for operating the site that DOE has submitted to us will meet those standards. What I tried to explained to people yesterday is that we have reviewed that application, and with some conditions that we are proposing, believe that those operating plans that the Department of Energy has will meet our standards.

Now it is that proposal that we're here in New Mexico this week for and will be accepting comments on until the end of February. We've laid our analysis out in a rational forum, and we're looking for comments from everybody on whether or not we did the analysis properly, whether we missed something, and people are raising a number of issues
21 in that regard.
22 We have made a proposal, obviously. We've been
23 reviewing this issue four or five years, so we come at it
24 having made that proposal but not closed minded. These
25 hearings are serious, we take all the comments seriously,
we'll take all the additional comments we can get in writing subsequent to these hearings seriously, and we'll consider all of them before we make the final decision. So I just wanted to make sure everybody understood the background of this particular set of hearings.

It's 3:47. I think we'll take a ten-minute break and come back at 4:00.

(A SHORT RECESS WAS TAKEN.)

PRESIDING OFFICER: I wanted to get a quick check on some people who weren't here earlier. Is Jeanne Carlston here?

(No response.)

PRESIDING OFFICER: Louise Bower.

(No response.)

PRESIDING OFFICER: Geraldine Amato. Okay, you'll be on next.

GERALDINE AMATO: My name is Geraldine Amato. I'm a little discouraged that how would you say, that it seems more show than substance, because it's apparent that behind the scenes the ringleaders are intent on proceeding no matter
what the people have to say. And we're all here spinning our
wheels and talking and kicking up a little dust but it
doesn't seem like we're making any progress on the roadway
here. But I'll kick in my two cents as well.
I believe that the nuclear energy industry has a

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momentum of it's own at this time and many of those persons
who are in control of it feel like they have the personal
resources to escape the consequences of any disasters that
might occur where many us don't have that option.
In fact I heard reports that some them who are
wealthy enough have built bunkers underground in case of an
accident in their vicinity, they could escape to an
underground bunker for a while until things cooled down.
Talking about putting this stuff on the highways is
a madness beyond comprehension. We're talking about putting
that stuff on the highways with all of the things that go on
the highways.
Another issue is centralization of political
authority in Washington D.C. and the co-optation of the
sovereignty of the people which we as a constitutional
republic were supposed to maintain. So we have lost our
sovereignty as a people, the states have lost their
sovereignty as individuals, nations, states, republics, and
as an unauthorized concentration of authority in Washington
D.C. under the federal powers that we have yet to realize and
yet to resist at this time.

How we will do that remains to be seen, but I think we need to start thinking about it, that we have permitted the new certification of the sovereignty of the states by the federal government and then we just are being bossed around.
and kicked around repeatedly.

We don't find remedy or recourse. We don't find regress. We get lip service and double talk and side stepping and other such maneuvers that keep us thinking that maybe we're making some progress, but we're not getting anywhere. We are just shooting the breeze and there are those who intend to proceed and they have no regard for the life and liberties of the ordinary citizen who's not a part of their kabob.

I mean the WIPP project and also the nuclear energy and the nuclear armament industry itself is just one arena in which we can perceive that something is seriously amiss and what political realities that we as a nation are facing.

And whether we are serving on the EPA or ordinary citizen concerned about what's going on, we all need to realize that unless we reclaim the authority of the people as sovereigns, there are four basic premises of our form of government, checks and balances, which we have essentially lost; separation of powers, which we have essentially lost; popular sovereignty, which we have essentially lost, and
there was another one. Individual -- I think it is

individual freedom.

We are moving towards dictorial regime, and how we

play out these matters here in the WIPP project and the EPA

hearings and all this and that is just another evidence of
Gold only knows I think all of those of us who have an understanding that there is a spiritualism to these struggles that we're facing, I think need to consider engaging in prayer that we might pray that we might have the counsel of the Holy Spirit and the most high God in -- as our counselor in how we might deal with the issues before us.

We're in a spiritual battle as well as political and social warfare, and we have to engage ourselves spiritually as well. If we don't we're not adequately prepared for this.

There's an evil among us in this nation, and we are not perceiving it adequately enough to let us know how we can best come against it. Evil must be resisted, and those who would have despotic power will not be persuaded by words. They must have actively resisted. And we have not come to that point at this time.

We have seen over the many recent past years that our words have moved nothing. We have seemingly delayed but we have not changed anything. Seemingly we have delayed but
I don't know whether things are being done without our
knowledge rather than having been delayed at all.

It may be that things are proceeding despite the
fact that publically they have not without people's input.

So we have been deceived on every hand so why should we think
that the ring leaders aren't doing what they want anyhow.

No matter what you say here and what you as
servants on this Board even decide to do, whether these ring
leaders with extraordinary power and control of our nation
will do what they damn please any time they want, because
they have power and we have permitted them to do so and we
have not resisted it. If they gain total control and power,
they will do what they are doing in secret now out in the
open. And we're all going to be up a creek without a paddle
unless we're a member of their gang.

This has to do with the five powers of control, and
it's apparent in this arena and upon which we have scheduled
this meeting today.

Again I just urge those who understand it, there is
a spiritual connection to themselves to engage in prayer that
we may have the counsel of the most high god, and that we may
have that help in redeeming the time, because the days are
evil, and realize that the days are evil and we need that
help from the counsel of the Holy Spirit and living God. And
I thank you.
PRESIDING OFFICER: Thank you.

Next is Emmett Garrity.

EMMETT GARRITY: I'd like to wish you all a Happy New Year, and I thank you for the privilege to be able to speak here today.
I think it is also a moral responsibility to be here to speak for those who are caught in the isolation of the misinformation that DOE and EPA perpetuate not only with regards WIPP but also the whole nuclear industry. After over 20 drawn out years, the changes, oversights and denials made by EPA to facilitate opening WIPP destroys my confidence in both EPA and the DOE as government agencies that are supposed to be operating at all the citizens benefits.

According to evidence, ignored and misinformed as shown by our political leaders, the lack of knowledge, there still exists several problems with EPA's certification. This information I got from Southwest Resources And Information Center.

EPA has ignored events that will cause massive radioactive releases that violate the disposal standards. EPA has dramatically underestimated the likelihood that drillers will hit highly pressurized brine reservoirs. EPA has not fully considered that drilling outside the WIPP site boundary would cause radioactive wastes that
21 violate the disposal regulations.

22 Most of the waste placed at WIPP have not been

23 characterized and EPA cannot know if releases might occur.

24 And lastly, EPA has refused to disclose the names

25 and qualifications of the contractors that did much of the

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technical work to support EPA's decisions. These are very
significant issues. But even beyond these lie greater
issues.

What kind of logic is there to move extremely
dangerous radioactive waste, some of which is unknown in its
chemical composition across 21 states. What kind of logic is
there to move waste from these places that are only a handful
of the over 400,000 superfund sites in the country. 400
superfund sites and we want to create WIPP?

Two billion dollars later what could we have done
with that $2 billion for those other sites that probably
won't be touched. But then there's money to be made, someone
stands to gain. I'm not sure who it is. I'm sure it's a lot
of contractors doing the work.

That is the question I ask of those at the reigns
of the misinformation, what level of confusion are they in to
be complicit in this collective social sin.

The argument to contain this waste at one site is
ludicrous when so many uncertainties and realities of
exposure and accidents exist. But then the argument does
21 make sense when you consider the gain factor. Who stands to
22 gain from this?
23 The whole nuclear industry is under a lot of
24 pressure to resolve the waste issue in order to facilitate
25 the future waste created. That is the waste created
tomorrow, next year, the next five years. This waste will
need storage as well.

Is the need to move this waste from the site based
on some hidden greed or agenda? For instance, the
preprocessing of spent fuel at the Savannah River site. Once
they start their shipments to WIPP, will this open the door
for more reprocessing? Not only at Savannah but at Hanford
and Idaho National Engineering Lab.

Are they going to start reprocessing the fuel
because they have more places to store it? What will it take
for the United States, the DOE and the EPA to understand that
this is wrong to create waste that has such devastating
consequences. Why are we burying it?

Putting a band-aid on the problem will not resolve
the issue. Continuing to create more waste is a big part of
the problem yet greed and minority of people stand to gain
tremendous profits by the proliferation of nuclear
by-products and waste.

It is ludicrous to even think that we are capable
of safely storing this amount of radioactive waste for 10,000
years when we cannot even guarantee that we'll put a dent in
the 400,000 superfund sites over the next 100 years.
What right have we to pass on such a legacy of
death as this? Is all of this, the industry, the waste, the
misinformation the byproduct of an out of control consumer
Looking at this big picture, I can only see a cultural collective self absorbed. And in the passing of the cultural torch not only are we passing on the collective social sin, the legacy of the nuclear industry, but also inherited is the weight of the trained future generations. I still believe WIPP is unethical. I pray that other alternatives will be found and that you will leave the waste where it is and commit resources to other alternatives.

Thank you for this time.

PRESIDING OFFICER: Next is Jeffrey Rich Munos.

JEFFREY RICH MUNOS: Good evening. My name is Jeffrey Rich Munos. I am a volunteer board member of Wells Park Association, which is a WIPP-involved business downtown. It is a historical area and it also borders the WIPP route, and I'm here to represent 1,300 people and 200 businesses. I just would like to let you know that I live in the city because for various reasons, one of them is the climate and hospitality, and I enjoy living here, especially downtown.
I have two stories to tell you and they do relate to WIPP in a way. My grandmother is 85 years old and she would tell me stories or when she first heard the radio. She was a little girl and she was brought into a tent with men and they had to pay a penny each. And this radio was run on
batteries and people would listen to the radio.

Her first recollection of that, of the new technology, was a boxing match though the boxers long forgotten, long dead. That always stayed with me about how things have changed recently.

Also, I'm 28 and I was surprised the first time I ever saw the Internet how interesting it is that we can all talk to each other. And I kind of just think about how within the last 100 years technology has really, really changed. And it has caused some problems and it's caused some solutions or provided some solutions. But with the technology there has to be some sort of planning.

For example in this city we have two national highways going through the middle of our city and now -- back to the 60's when it was developed it was great -- now we have to talk about pollution from cars and whatnot, and so instead of starting with a good plan, we have to fix things that at one time seemed like a good plan but now they are flawed.

Basically with the technology that we have today, comparing technology that my grandmother had, in the next 20,
30 years, who knows what we're going to be able to do. We might be able to find a way to make the radioactivity into energy, I suppose.

I know a little bit about the nuclear industry from my father. He worked for the Defense Nuclear Agency which is
now the Special Weapons Program, and I wasn't allowed to go
to Mercury, Nevada to see what he did, but he told me a
little bit what he could, what was not classified at the
time.

Basically the government tests and retests and
retests the same test over for our defense, for our
protection, for our peace. But at a certain point we are
wasting our money on retesting and retesting, but without the
long-range plan we have come to the solution of just burying
the waste like a cat bury it's waste, in the ground.

One thing we could do it we could wait, just like
my grandmother was able to wait from the battery operated
radio until the computer, we might be able to store this
waste where it was produced even if it might cost more money
now, and in 20, 30, 50 years from now with hopefully the
intelligence we have in the human body rather than -- anyway
with the intelligence we have, we might be able to better
take care of the waste.

I'm not even talking about not producing it
anymore. I'm not even considering that, because the
government is going to do what it's going to do.

But please just don't approve this project. Please
do not open WIPP. Even if your budget is cut, even if you're
thrown out of your job, even if your retirement is cut, don't
do that, please. Because in 20, 30, 40 years who knows how
we'll be able to deal with this solution.

Well, going back to the neighborhood association,

like I said many people in my area are poor, they are

Hispanic. I try to get them to turn on their street lights

to prevent crime, and a lot of them say, well, it costs too

much money to do that. It's a poor area.

But if one of those trucks overturns in my

neighborhood, I have absolutely no idea how the U.S.
government, how the city of Albuquerque, how the county of

Bernalillo will be able to clean up the mess to protect my

home. I want to raise my children in my neighborhood and so

far I haven't seen a way that they can guarantee cleanup in

event of an accident, and accidents do happen.

I'm sure many of you -- maybe you got into a car

accident in Albuquerque. It's very simple.

I believe back in Nebraska there was an overturn of

a truck and we believe it was warheads, and the government

came in, swooped down and was able to clean it up because

there was no leakage. But if there is, leakage, what is EPA

going to do? How can you folks guarantee that my
neighborhood would be able to be cleaned up?

So far I haven't heard any of that, and so I would just ask that we please wait and we please put it on hold where it is produced, and in 20, 30, 50 years from now we might have the ability to make this thing, the
radioactivity -- some other solution other than just burying

it. Thank you so much.

PRESIDING OFFICER: Thank you.

Next is Terry Sullivan.

TERRY SULLIVAN: I oppose the WIPP operation. We have made a horrible mess producing radioactive materials.

These materials remain poisonous for 10,000 years, I'm told.

How many generations of children are born in 10,000 years?

We cannot guarantee safety for 10,000 years, therefore, we must keep the poisons where they are so we will not increase the risks of tragedy caused by transport.

How many generations of children are born in 10,000 years?

PRESIDING OFFICER: Thank you very much.

Next is Andy Stanley.

ANDY STANLEY: My name is Andy Stanley, and I'm here today to ask that you continue to move expeditiously to certify compliance of the Waste Isolation Pilot Plant with the requirements of 40 CFR 191 in accordance with the criteria as set forth in 40 CFR 194.
I'm personally a Health Physicist and an attorney employed by Advanced Sciences, Incorporated, here in Albuquerque. However, today I'm appearing before you on my own behalf and not on behalf of Advanced Sciences.

As a health physicist I have extensive experience.
in radiation protection and the affects of radiation
protection and the affects of radioactive materials and
radiation on human health.
Specifically I conducted basic scientific research
on the effects of inhaled radioactive materials. In
addition, I have personally performed assessments of risk to
human health originating from the storage and disposal of
radioactive and hazardous waste and various sites throughout
the country.
This work included assessing the risks from high
level and low level waste and spent nuclear fuel as well as
transuranic waste. Much of this work has been incorporated
into environmental impact statements and environmental
assessments to guide cleanup activities at these sites.
I, therefore, feel I'm qualified to express
technical as well as lay opinions as to the safety of the
WIPP site and the necessity of aggressively pursuing its
opening.
In comparison with other hazards and radioactive
wastes that have been stored and disposed of in various sites
around the country since the beginning of World War II, the
waste to be disposed of at WIPP poses relatively little risk
if it is properly disposed of.

It consists mostly of laboratory trash and waste
sludges contaminated with small amounts of plutonium and
other transuranic radioisotopes. For the most part these
transuranic radioisotopes only have an impact on human health
when they are inhaled, or to a much lesser extent ingested.
That's not to say by any means they do not require care in
their handling and disposal. It is simply to emphasize the
potential risks they pose must be kept in proper perspective.
DOE and its contractors have performed a thorough
evaluation of both the ability of WIPP facility to safely
contain these radioactive wastes as well as the potential
health risks resulting from anticipated and unanticipated
release.
In both cases the results of these evaluations as
are demonstrated in the application and subsequent materials
that have been submitted to you, have demonstrated that the
WIPP facility will not only meet all regulatory requirements
by a wide margin, but will be protective of human health and
the environment, which is the more important consideration.
It is important to stress that these conclusions
remain valid even though many of the assumptions and
calculations used in the evaluations represent worse case
situations or values as opposed to expected situations or values. These conclusions were also reinforced when you, the EPA, conducted your own verification test in which the use of parameters -- in which parameters were used were often quite different than those used by DOE, and many of which were
suggested by public comment.

There are those that will argue we should leave these wastes stored where they are until such time in the future when we have the perfect scientific solution. I would propose to you that there are these two major problems to this approach. First, new scientific approaches often create new and unanticipated problems in their own right. Secondly, even if that perfect scientific solution were to be forthcoming at some time in the future, we can't afford to wait for it.

I have visited most of the DOE sites at which this waste is currently stored. Some of it is buried in trenches covered with shale or dirt. Most is stored in drums or other containers that have a limited useful life. Even that waste that is stored above ground on well kept and covered concrete pads needs to be repackaged at periodical intervals to prevent the escape of materials due to loss of container integrity.

Every time such waste must be handled, the potential for worker exposure is increased.
We cannot afford to wait. We have the problem now and we need a solution now. That solution is WIPP. I commend EPA for the work you have done and the evaluation of the rather large certification application that you had to go through.
I urge you to continue to promote the protection of
human health and the environment by promulgating a final rule
certifying that compliance of the Waste Isolation Pilot Plan
with the federal and environmental standards for disposing of
defense related transuranic radioactive waste.
I thank you for listening and I have a written
submission.

PRESIDING OFFICER: Thank you very much.
Sharon Williams.

SHARON WILLIAMS: Good afternoon and thank you for
allowing me to speak today.

My name is Sharon Williams and I'm the co-chair of
the Green Party of Bernalillo County. I'm here to put down
for the record New Mexico Green Party's platform's position
on the Waste Isolation Pilot Project in southern New Mexico.

We called for the cancellation of the Waste
Isolation Pilot Project in southern New Mexico. We have
oppose the importation of high level nuclear waste, for
example, spent fuel rods, to New Mexico as part of the
monitor retrievable storage MRS program. We believe
environmentally sound alternatives to MRS and underground storage can be developed and we oppose the transport of this waste until such alternatives are found.

In the meantime we call for the permanent aboveground continuously monitored storage of nuclear waste
at or near the sites where it is generated.

Basically the Waste Isolation Pilot Project is not good science, and I really feel that basically it's pushing of the radioactive contamination on the next set of generations of Americans.

I'm here basically as a representative of the Green Party and also as a person who basically wants to speak for the children who will be born in the next and however long it takes for WIPP to -- for the radioactive poisons to get out into the environment basically.

Dr. Helen Coldicott in her book, If You Love This Planet, Kill The Earth, made some recommendations that I believe are necessary in order to make what we in the Green Party discussed of New Mexico's platform.

All nuclear reactors, both military and civilian must be closed down at once so that no more waste is produced, no more bombs are made, and no more accidents can occur.

Two-thirds of the scientists in the United States who work for the military industrial complex, their brains
should be used to be taken from weapons manufacture to the
urgent task of finding safe alternatives for basically
storing this radioactive waste that we've created over the
last 40 years.

Basically the oversight of the Environmental
Protection Agency, in my opinion, has been compromised by Senator Pete Domenici himself, and because he's threatened the EPA with cutting their budget and with making this -- forcing this on all of us. He basically has a disdain for sustainable economic energy resources. He doesn't want us to look for alternatives to using nuclear power, and I think that is important and I think we have to be looking in that direction.

The WIPP project has set since it's inception and all of the sites, because all the sites that the Department of Energy have created are basically radioactive and dangerous, as a lot of people have talked about today. Why should the public trust the Department of Energy's administration of WIPP when it has such a bad track record basically.

The expanded use of nuclear materials should be stopped immediately because it is a Pandora's Box that never should have been opened in the first place. The WIPP site will have an expanded use of nuclear power and it will also
create more uses for the military and more creation of
nuclear bombs and the extension of what was perpetuated
during the cold war.
Also other nations around the world can see this as
a sign that they can do the similar thing as to what we are

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doing right here, that they can also create WIPP sites in
their own country. They can just go and bury their waste and
that's okay.

It's sort of like what we have to be doing
basically is we have to turn of the faucet. We have to turn
of the faucet, which means we have to stop the nuclear power
industry and we have to stop the creation of more nuclear
weapons in this country, because it doesn't do any good to be
just creating all of this waste and burying it somewhere when
the faucet is still on.

It's like putting up a dike in a basement and
you're basically putting up this dike while the water is
still coming in and it is flooding your basement. So what
are you going to do, it's flooding your house and your house
is going to be destroyed by it eventually.

I think it's important to remember that the WIPP
site and others like them in the future are going to expose
millions of people to radioactive food and water, increased
incidences of genetic diseases, deformed babies, epidemics of
children dieing from cancer and Leukemia, and is this the
kind of environmental devastation that the Environmental Protection Agency, with its fine record of service to the American people, wants to leave the next seven generations of humanity?

I think we need to remember the words of Chief
Scavelin (sic) in 1857, the does not belong to us, we long to
the earth. These words are as true today as they were 160
years ago and even more so.

Thank you for your time and attention.

PRESIDING OFFICER: Thank you.

Next is Ms. P. Diegos.

(No response.)

PRESIDING OFFICER: Dennis Brown.

DENNIS BROWN: Good afternoon. My name is Dennis
Brown, and I'm here today to provide my personal comments on
the proposed rule. I'm not here representing the DOE, even
though I currently work in the Carlsbad Area office as
Quality Assurance Manager.

I've worked in the nuclear QA business for over 15
year now and would consider myself an expert in the area of
quality assurance. I've got experience in the various,
numerous nuclear power plants, the high level nuclear waste
program, various state and local waste programs and worked on
the WIPP project for the last five years.

I want to commend EPA for doing a good job of
21 reviewing the CCA is used in the draft rule. However, I'd
22 like to talk a little bit about conditions two and three in
23 the waste certification area.
24 As a concerned citizen and nuclear Q.A.
25 professional, I really don't see any value to the DOE
certification process or any additional protection to the
public by delaying the shipments from the TRU waste sites
over and over again as EPA reapproves our Quality Assurance
program over and over again.

These are fairly new requirements that have just
been heard of since July of 1997. They are time wasting and
very expensive to implement.

The DOE has already proved to the EPA over and over
again that we've met the rigorous quality assurance standards
of the NQA-1 standard as evidenced by the proposed rule.

As far as TRU waste certification, it is a major
subset or component of our TRU waste certification process at
DOE. Each site develops a TRU waste QAPjP and site quality
assurance program plan. These quality assurance programs
QAPjP's were referenced in the Compliance Application in
October of 1996. There were nine of us in there that were
approved by the DOE. And I'm not aware of any public
comments or EPA comments or even EEG comments on these
documents.

The diagrams basically describe the entire
characterization process of the site used to characterize the waste and to review and validate the data that comes from the process. So I'm wondering why if, in fact, the EPA and the public have not commented on these documents over the last year and a half, why would EPA want comments on those
documents now?

In addition, EPA recently participated on the draft of DOE's certification process of Los Alamos National Laboratory. In fact I was at the conclusion meeting where EPA made the statement that the DOE Q. A. program was adequately implemented thus meeting the requirement of 194. As a result, EPA has clearly indicated in the rule that we have demonstrated -- that DOE has demonstrated that the entire set of required QA controls have been met for Los Alamos National Laboratory, which is a typical TRU waste site.

I would also like to note that the Q. A. standard is identical to 10 CFR 50, Appendix 3, which is the Q. A. standard invoked by the nuclear regulatory commission for every nuclear power plant in this country. During the licensing phase of all of these 120 U.S. nuclear power plants, the Nuclear Regulatory Commission did not go out and inspect all of the 200 plus suppliers and compost manufacturers making nuclear reactors and power plants. They relied upon the quality assurance programs of the commercial
nuclear power plants. The analogy is TRU waste sites are
supplying waste to the WIPP Project. The DOE sets the
requirements. My question is should the EPA be concerned
about increases in costs that don't increase public safety.

In summary, DOE has demonstrated to the EPA
numerous times through their inspections, they've
participated seven DOE QA program audits on the different
various TRU waste sites.

In addition, they have spent another 11 quality
assurance program audits over the last four years. They have
reviewed thousands of TRU waste documents on these audits at
the TRU waste site, they've witnessed hundreds of interviews
with DOE and contractor personnel. They've actually conducted
inspections of these DOE audits over the last four years
since 1995, and there's no additional increase in nuclear
safety environmental protection as a result of implementing
these conditions.

So I don't see any added value to reapproving the
DOE quality assurance program over and over and over again
for every site and waste stream that comes out of the site.

In conclusion, it is the taxpayer that continues to
pay for the cost of storing the waste out of the TRU waste
sites. I believe the EPA should remove conditions two and
three from the rules so that DOE can ship the waste once we
receive certification from EPA. Thank you very much.
PRESIDING OFFICER: Thank you.

MR. MATTHEWS: I have a question. EPA's proposed rule is based on the compliance criteria 40 CFR part 194. Are you positing that the requirements of 194.228 do not require quality assurance programs at the various waste
generator sites with respect to waste characterization activities?

DENNIS BROWN: No, I'm saying we've demonstrated that already. The entire process at Los Alamos, which is identical to all of the other TRU waste sites as far as procedures and policies that they put in place.

MR. MATTHEWS: I just want to make sure I understand your comments. Your comment apparently is that you have demonstrated establishment and execution of the quality assurance program at LANL for one waste stream, and that EPA should then take it on faith that you can at some point in time in the future establish and execute a quality assurance program at the other waste generator sites for our numerous waste streams. Is that what your saying?

DENNIS BROWN: The procedures, policies at all data sites are identical to -- the requirements are identical. The Carlsbad Area Office that sets the requirements, each site meets those requirements. We demonstrated that process throughout. We have three certification audits, DOE has three certification audits at Los Alamos.
MR. MATTHEWS: At LANL.

DENNIS BROWN: At LANL. The procedures, the standard operating procedures are identical at the other sites with the exception of they may use a different serial number for a piece of nondefective assay equipment.
MR. MATTHEWS: But the compliance criteria require EPA to have demonstrated that the quality assurance programs are established and executed.

DENNIS BROWN: That's correct, we've executed the programs at the other waste sites. Can you define what you mean by execution?

MR. MATTHEWS: Execution, you've got a program and it's been put in place.

DENNIS BROWN: But the standard talks about the DOE's quality assurance program. It doesn't talk about the individual sites. I don't know of any case where it states in the rule that it says individual sites must have executed Q. A. programs. It specifically says the DOE's quality assurance program.

PRESIDING OFFICER: All right.

DENNIS BROWN: Is that correct?

PRESIDING OFFICER: We understand what you're saying.

Next is Will Beems.

WILLIAM BEEMS: Good afternoon. My name is William
21 Beems and I've lived in New Mexico for over ten years.
22 I want to thank you for being here and fulfilling
23 your obligation to hear the public's final opportunity to
24 speak to the federal government with regard to their fears,
25 their concerns and many of the unanswered questions that
remain around WIPP. I presently work for the Albuquerque Public School System, but I'm here as a concerned citizen. However, my most immediate concern with my students is that as a teacher it is difficult for me to explain to my students when they inquire and explore the question of scientific validity how in the instance of something as serious as the disposal of nuclear waste the government, through the EPA, provides safety standards with sources that are not only anonymous but that present no credentials at all.

This is a serious question that really brings out a great deal of -- it seriously questions the credibility of EPA's position with that regard.

There's been a variety of evidence presented and to be presented in opposition to WIPP. I am not a scientist, but I do not feel that WIPP is safe nor that EPA is in fact doing it's job, that of protecting the health and well being of this nation's population.

Obviously the most grievous assault will be on the people of New Mexico determines it for all of the TRU waste
21 shipments. The reality remains that for people all across
22 this country, 21 states, I believe, will be, in fact, put at
23 risk through the shipment of that same TRU waste.
24 I realize this hearing has nothing to do with
25 transportation issues. That has already been taken care of,
white washed, if you will. The reality is that there will be
accidents, and yes, sooner or later in the coming years there
will be releases of lethal radiation.

At this juncture the only barrier, the final
barrier, is to keep this highest assault on the American
public from occurring by not opening the WIPP site.

Of course, this is not to say that there are no
questions with regard to the actual site. You will hear
today and throughout these hearings legitimate questions
raised to which there has been no reasonable response given
as far as I have been able to tell.

The presence of karst formations throughout the
WIPP site area, ongoing resource drilling and the methods
used, whether they be air injection or brine, have not been
adequately answered.

The question of the brine deposit at the site has
not been really looked at sufficiently. It exists. I
understand you may not feel that way.

The final question, you know, 10,000 years, I mean
10,000 years. I don't understand how -- I realize I
21 understand that it is not you five individuals who are doing
22 this as hearing officers, but the vanity of people who think
23 they can grasp 10,000 years to hold an ongoing safe
24 protection, something so totally destructive as plutonium.
25 Well over 60 percent of the WIPP site is built for
future waste generation. That is for the creation, the
ongoing creation of nuclear armaments. That's what WIPP is
about is nuclear weapons. How in a period of supposed global
peace the American government can propose to continue to
generate such weapons is madness. It is a vile and vicious
indictment of this government and the society gone mad.

With all of this said, I would like to close by
revealing a significant conflict in my own personal life's
journey. I've been a student of Kioson Josi Sazaki Roshi
(spelled phonetically) for the past 15 years. Teachings from
this lineage of Zen Buddhism encourages not toward anger or
violence. Though the creation and maintenance of this
nuclear nightmare is indeed a form of violence, we are
couraged instead to find acceptance in our minds, out
hearts, for those who create consternation in the world.

I can look at you each individually and find that
acceptance, but in all honesty, I must confess I continue to
loath what you stand for and I am incredulous that you can
even consider the supposed viability of this project and show
such common disregard for your fellow citizens.
Lady and gentlemen, from my perspective you cannot
reasonably stand for the opening of this dump, the first
permanent site in the entire world -- entire world. I ask
you that you please pause, that you give a moment's thought,
many moments thoughts. You must consider not just seven
generations, seven times seven generations.

(Foreign language) I'm from Kansas originally, and that means, thank you God.

PRESIDING OFFICER: Thank you for coming and for the testimony.

I understand P. Diegos is here.

P. DIEGOS: I'm an attorney. My name is Pia Diegos and I'm speaking on behalf of the National Lawyers Guild. The National Lawyers Guild is a group of attorneys who are more concerned about human rights than they are property rights, so that the National Lawyers Guild has traditionally represented poor people, people of color, people on the outside.

And we are really concerned about the WIPP, Waste Isolation Pilot Project, and we want you to not open it. We think it is very interesting that in this era of environmental justice that we would put a nuclear repository right close to the border with Mexico, right in one of the poorest states in the nations, one of the states in the nation populated with Hispanic people, people of color.
That's because the United States government has traditionally placed waste dumps and environmental hazardous activities in areas where people are the most vulnerable. Now there are some scientific problems with Waste Isolation Pilot Project that I'm sure that others who know more than I
have brought to your attention, but I would like to do that again.

One is that you're building it over an area that is water filled. You have running aquifers under the repository and specifically, I think DOE's own figure recently is that they admitted that there is a brine reservoir that extends to 40 percent, the channels right underneath. That coupled with the studies by Richard Phillips, who is a hydromorphologist, shows that in the event of the E1, E2 scenario or in the event of any driller after 100 years that would reach the site, that there is a very high probability of the water leaving -- of contaminated radioactive water leaving the site and going into the salt water lake that is outside of the salt and outside of the WIPP area and then into the Pecos River.

The way this would happen, according to the work of Richard Phillips, is that you have water draining -- see DOE has found, has stated, has studied, has exposed that the water in the WIPP area is ancient water. It goes back millions of years, but Richard Phillips, through his studies
and his specialty, has shown that or can show that that water
is actually renewed yearly by the rain water. So that water
is actually running at a faster rate that DOE says it is.
So that means that if it is running at a faster
rate and it is trickling down faster and moving and therefore
any radioactivity that would get into any of the reservoirs or any of the karst areas or any of the channels under there would basically run at the speed of water and violate and permeate the areas that are within the WIPP site and would contaminate the outside region.

So we as an organization urge you to look very carefully at the work of Richard Phillips and consider that this is not an area that is static or that is close to static. This is an area that is teeming with water, and so that any -- the E1, E2 scenario which is that one person would drill after 100 years, would go past the repository and into this area that is passed the Castille area and then because of the pressurization, then all of this brine would shoot up. And then according to New Mexico regulations, the very conscientious driller would then plug up the first drill hole, the first bore hole and then there would be a second driller.

And the second driller would then drill down, and as soon as the second driller got into the repository itself, the second driller would hit a very pressurized slurry of
radioactive brine and radioactive waste. It would be very
pressurized because the first driller would have gone down to
the Castille, and then that brine would then fill up the
whole Salado area in the repository. And then that would
shoot up.
Well, that scenario when coupled with Richard Phillips work would be much more devastating and would have much higher rate of probability of contaminating the environment.

So I urge you to look at his work and we as an organization on behalf of people who we represent urge you to not open WIPP. WIPP is really just a clearly expedient to facilitate the continuation of the production of nuclear weapons and nuclear products, and what we really need to do is to stop the production of nuclear weaponry and nuclear products, and not look for false solutions to the problem that has no solution.

PRESIDING OFFICER: Thank you for your testimony.

Thanks for coming tonight. Thanks for bringing your children.

Next is Lily Rendt.

LILY RENDT: No, I spoke already.'.

PRESIDING OFFICER: Oh, I'm sorry.

LILY RENDT: Yes. I can speak again, but I think I ought to forfeit to the other people.
PRESIDING OFFICER: Okay, we'll wait until we get to other people.

Peter Swift.

PETER SWIFT: Thank you for the opportunity to comment on the proposed certification. I'm Peter Swift, and
I live here in Albuquerque and some of you know me. I have worked on the WIPP the last eight years at Sandia National Labs. I'm speaking for myself today and as a member of the general public and as a resident of Albuquerque.

First I want to state clearly that I agree with the EPA's proposed certification. I'm very familiar with DOE's application and with the EPA's regulation and I agree with your conclusion that WIPP complies with 40 CFR 194 and I think that is the main point of these hearings.

I want to use the rest of my time to talk about a single issue which is fluid injection. Critics of the project have argued that DOE has overlooked the possibility that brine injected in the subsurface, either for disposal or as part of a water flooding operation to enhance oil recovery, could escape from the intended injection zone and flow to the WIPP and flood the disposal region.

I want to argue and I want to state that DOE and EPA, neither, have neglected this possibility. Rather they considered it very seriously. DOE has presented extensive written information to the EPA on the subject, and I'm not
going to go through any of that now, but I want to restate
three major conclusions.

The first point is that large water flood operations, the type associated with leaks elsewhere in the
region, do not now occur in the vicinity of WIPP, and it is
not certain they will in the future. It is also not certain
they won't occur either. But even if they do, injection
wells will not operate any closer to the WIPP in the boundary
controlled area which is as closest to a mile and a half or
more from the waste and most waste is further.
The closest injection well now operating in the
region is approximately three miles from disposal panels.
The second point I want to make is that all the
leaks have occurred in projection wells elsewhere in
southeastern New Mexico in the past, and that's obvious,
these leaks occurred with older wells constructed with
relatively primitive methods and without modern casing and
cemented techniques.
Production and injection wells near the WIPP have
mostly been drilled in this decade and have two or more
strings of steel casing cemented through Salado formation,
and there are extensive records of annual tests to indicate
their have been no instances of major leaks from wells of
this sort.
The evidence is very clear that modern wells like
the ones near the WIPP are far less likely to leak than older ones.

The third point I want to make is that Sandia has done computational modeling and I'm speaking here as member of the public and not of Sandia, but I'm very familiar with

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the modeling work. Even for the worst cases they have examined there was no effect on the repository even if major leaks did occur at injection wells.

These worst cases looked at at Sandia were not particularly realistic. Modelers assumed that injection wells operated continuously for 50 years at pressures above those normally permitted by the state, leaks occurred directly in the Salado, and for a leak this to occur directly into the Salado, there would have to be simultaneous failure of both tubing or packers in the well and two strings of casing and a cement sheet. Leaks were assumed to endure for 10 years without detection, despite state requirements for annual reporting wellhead pressures for annual testing of every five years, and for a leak like that to occur, it would require both the failure of the state to enforce existing regulations and extraordinary negligence and incompetence on the part of the oil field operators.

In conclusion, I appreciate critics' concerns about leaky oil field injection wells. I fully agree this is something the EPA and state of New Mexico should consider.
I also believe they have done so both from the certification of WIPP and general protection of ground water. I also believe the DOE has done a thorough and responsible job of evaluating the possible effects of waste on WIPP, and believe EPA has made the correct decision with
respect to certification. Leaky injection wells do not pose
a threat to WIPP. Thank you.

PRESIDING OFFICER: Thank you for coming and for
your testimony.

Next is Hong-Nian Jow.

HONG-NIAN JOW: Good afternoon ladies and
gentlemen. My name is Hong-Nian Jow. I'm a resident of
Albuquerque and work for Sandia Laboratories. I appreciate
the opportunity to come here to make my personal comments on
the EPA proposed rule before you on the WIPP CCA.

After the DOE submitted CCA on October 29, 1996,
EPA had put in a tremendous amount of effort and the resource
to renew the CCA and other supporting documents, and I would
like to take this opportunity to speak about my personal
experience in interacting with EPA staff and their
contractors during their review of the documents pertaining
to the performance assessment Sandia did in support of CCA.

I would like to make the following three
observations: Number one, EPA staff and their contractor
worked very hard in reviewing those documents Sandia did. As
far as assessment. There were many evenings they stayed late
in the Sandia Vista building looking through documents of the
PA analysis reports and PA computer codes document.

Number two, EPA staff and their contractors were
highly competent in understanding the technical complexity of
the PA. They spent many weeks and months looking into the
codes, the files, even files Sandia used in their PA
calculations, and they had many, many meetings and discussion
with the Sandia staff in order to ascertain the technical
adequacy, traceability and reproducibility of the PA results.
The questions they raised in the review comment of
the CCA were technically relevant to the safety of the WIPP
performance.
Number three, the PA verification test calculations
also called PAVT mandated that EPA was a demonstration that
EPA's comprehensive and thorough technical review of the
Sandia performance assessment work in the CCA.
Finally I support the EPA proposed decisions on the
WIPP CCA to open WIPP, and lets begin to solve the national
problems of the legacy of transuranic waste. Thank you.
PRESIDING OFFICER: Thank you.
On the schedule we're now up to -- we are going to
take a dinner break at 5:00. It's now 25 after, but before
we break I want to double check who was on our list before.
Jeanne Carlston, Louise Bower, Paul Rueckhus, Maria
Baca. Are any of them here or are they probably going to come tonight?

(No response.)

PRESIDING OFFICER: Judy Kaul or Victoria Michelle?

(No response.)
PRESIDING OFFICER: I think we'll --

UNIDENTIFIED SPEAKER: Mr. Wilson.

PRESIDING OFFICER: Yes.

UNIDENTIFIED SPEAKER: I'm the first person on the walk-in list. My name is John McCall. If I could speak now, I'd prefer it instead of having to come back this evening.

PRESIDING OFFICER: Sure, we have time for one more.

JOHN McCALL: My name is John McCall. I'm an attorney here in Albuquerque, New Mexico, and I'm also a member of the state Green Council and also a member of the Association of Public Interest Law.

First of all, I would like to ask something, and that is if all the DOE employees in the audience could please raise your hands?

(DOE employees raised hands.)

And could all the EPA employees raise their hands?

(EPA employees raised hands.)

JOHN McCALL: I was just curious. I did have an objection to the testimony of the gentleman from DOE, not the
one that just testified but previously who was responding to
questions. He said he was testifying as a citizen and then
he responded to the questions as we. And the idea of the DOE
coming here to testify kind of baffles me a little bit from a
legal perspective because it should be public comment and not
agency to agency comment the way I see it. So I have some

concerns about that.

Are people out there ready for a lawsuit?

(Shouts from audience.)

Okay, because there is going to be a few filed, I

would imagine. And I know you can't stop that from

happening, but there have been several in the past. It's

interesting to note that through all this legal fighting,

even though the fact that we've already dumped enough

radiation in the Savannah River to kill everybody on the

planet, we're still not able to stop WIPP.

I just wanted to read you a couple of quotes from

previous legal cases. One was Attorney General Udall and the

State of New Mexico versus Environmental Protection Agency.

That is 114F3d Federal Reporter and 290, and this was in

1997 -- I'm sorry I misquoted. The first one I want to read

from is a 1992 case in which the court held that the

defendants have presented no convincing evidence. That the

hazardous waste materials they seek to introduce into the

WIPP site can be retrieved. Defendants argue that it is the
very nature of the salt beds which would effectively provide
them with a six-month warning mechanism which in turn would
allow them to retrieve the waste as need be.

Specifically, defendants contend that enhanced
gеotechnical monitoring systems will provide at least six
months ago of advanced warning of a potential roof fall

enabling the safe retrieval of waste. The record, however,
shows there's a great likelihood that the waste proposed to
be in place in WIPP will not be retrievable after the test
phase. I think that's still true today.

Secondly, I would note something that's been of
interest to me for about a year now since I saw it in the
national news, passive institutional controls. And you all,
of course, under the Chevron standard, are allowed to
implement agency discretion in citing the rules. However, I
don't know if you're able to pass the due process standards
of the United States Constitution when we are looking at the
futures of, as somebody said, seven times seven generations
of American citizens.

God forbid that we step on the constitutional
rights of unborn children by what we do today. In that line
of thinking, the court held, as I mentioned before in New
Mexico versus EPA, 1997, and that is the site I have
mentioned, 114f3rd 290. EPA's final rule permits DOE's WIPP
application, when calculating relief probabilities, to take
credit for passive institutional controls, PIC's, which
included devices such as permanent markers designed to avoid
inadvertent human interference.

The disposal regulations require, quote, most
permanent markers, records and other passive institutional
controls practical to indicate the dangers of the waste and
their location. That's at 40 CFR 191.14(c). This is the
regulation at issue.

The criteria provide that credit can be given for
PIC's for no more than 700 years and that DOE can request in
no case assume that PIC's will, quote, eliminate the
likelihood of human intrusion entirely.

In addition, the final rule requires that DOE show
that the PIC's will, quote, endure and be understood by
potential intruders for the relevant time period.

Now does anybody think we can make a sign that will
be understandable in 10,000 years in this room?

UNIDENTIFIED SPEAKER: No way.

JOHN McCALL: Does anybody have an idea what human
intelligence or any kind of intelligence on the Planet Earth
will be like in 10,000 years. I think right there that
you've got a serious problem. It's what people have been
going back to over and over again is the 10,000 year
standard, which really should be a million years when you
look at life on earth is not being respected, and, therefore,
I would propose that part of the lawsuit that is potentially

going to be filed against the EPA and DOE, that the rights of

future citizens are not protected by this rule. Thank you.

PRESIDING OFFICER: Thank you for that testimony.

It's 5:30. We're going to take a break until 7:00. We're
going to be back at 7:00, as I mentioned and we'll be here as
late as we need to as long as there is somebody here who is
scheduled or wants to testify.
So we'll see many of you back here at 7:00.
EVENING SESSION
ALBUQUERQUE, NEW MEXICO
PRESIDING OFFICER: Good evening.
For those of you who weren't here earlier, my name
is Dick Wilson. This is a continuation of area hearings in
New Mexico on our proposed approval of the DOE operating plan
for the WIPP site near Carlsbad.
We have a number of people who are scheduled to
testify tonight. We have some people who have signed in
earlier today that probably are here, and I suspect some more
will come to sign in.
If there is anybody who hasn't already signed up
and would like to testify, if you would please check in with
the registration table out front. We plan to be here as late
as we need to be here to give everybody a chance to testify.
Tomorrow we'll be here until noon and then we're
going up to Santa Fe for hearings tomorrow afternoon and
tomorrow evening. So we will need to sort of keep on
schedule tomorrow, so tonight is our chance to give people,
allow testimony, and we'll do that.

The first witness this evening is Richard Phillips.
RICHARD HAYES PHILLIPS: My name is Richard Hayes Phillips. I have a Ph.D. in Karst geomorphology. My own definition of geomorphology is the study of land forms and the processes which create them and destroy them.

Geomorphologists are interested in the geologic features at the land surface. We are also interested in the subsurface if rivers and streams flow underground. In what is known as Karst.

I have here a map of the United States showing the regional Karst lands, and you will see southeastern New Mexico, the Pecos River Valley, as one the largest Karst lands in the United States of America -- comparable to the Ozarks, Mammoth Cave and other Karst areas. This includes the Santa Rosa Sinks, the Bottomless Lakes and Carlsbad Caverns.

It should come as no surprise that the WIPP located in the Pecos River Valley is in karst. This transparency is from any dissertation. The EPA has three copies of it. This shows the Mescalero Plain which is part of the Pecos River Valley karst land. The Mescalero Plain is
actually an opt land above the Pecos River Valley that is
mostly overlain by Mescalero caliche.
Those who have land in New Mexico in semi arid
regions and have attempted to dig with shovels in their
backyard have probably encountered caliche. It is a cemented
crust of a form of limestone that forms in desert soils at the depth of rainwater infiltration.

Where the caliche is hard and cemented, it is almost impermeable and very difficult to dig through, but as I will demonstrate shortly, the Mescalero caliche is not a continuous surface at the WIPP site itself. It has fractures and holes that have eliminated probably 15 percent of the caliche surface and which allow rain water to penetrate.

Now it is traditional in the study of hydrology to divide the world into watersheds or drainage basins, the boundaries of which are groundwater divides. In most cases, drainage basins have outlets. The lowest point in the drainage basin is where the trunk stream, the largest river in the water shed, flows into an en larger one. But there are some water sheds, some drainage basins which are closed, which means that if you stand in the lowest point of the drainage basin, the land will rise around you on all sides.

This is a map of the Nash Draw Watershed. This is also from my dissertation. These show the groundwater divides.
Here is the WIPP site including the outer zone that has now been eliminated from the WIPP site boundaries, and you will see the largest feature in the watershed is Nash Draw.

We normally think of a draw as a dry river course,
but Nash Draw is different. Nash Draw is one of the largest Karst features with surface expressions in North America. It formed gradually over time when underground streams and rivers corroded open cavernous channels underground which sooner or later collapsed, and all the rocks above that collapsed as well.

This forced the water to find other paths underground, and then those caverns collapsed forcing the water to find another course and so on. The end result is a drainage basin closed on all sides with groundwater seeping into it from all directions. It is about 15 miles long, about five to ten miles wide, and comes within one mile of the current WIPP site boundary.

At the lowest point of Nash Draw, is a huge salt lake known in Spanish as Laguna Grande de la Sal. It has no outlet at the land surface. It has no outlet in the subsurface. It loses water only by evaporation and here is why that is important.

I have here the first detailed map ever made of Laguna Grande de la Sal made in 1934, at the very start of
potash mining in Nash Draw. This is the natural extent of
the salt like excluding the islands in the middle of the
lake. It was three-and-a-half square miles in extent.

Now as I said, a salt lake loses water only by
evaporation. It has no outlet at the surface or subsurface.
It is a basic hydrologic equation that does not change anywhere in the world that a salt lake in a closed drainage basin has a water balance. The amount of inflow to the lake, whether it's on the land surface or underground plus the amount of rain water falling on the lake surface must equal the evaporation.

We know the natural extent of the surface of the salt lake 2,120 acres. We know the evaporation rate, we know the rainfall rate. It is easy to calculate from that the amount of groundwater that must flow into the salt lake in order for it to continue to exist in the face of such high evaporation rates.

The amount of water flowing into this lake, about 600 million cubic feet per year, tells you the amount of water in the groundwater aquifers that flow throughout the watershed, including the WIPP site. It is about 100 times as much water as the Department of Energy cares to admit to.

This means that there is about 100 times as much rainwater recharge to the groundwater aquifers as the DOE cares to admit to. That's why you have underground streams
flowing across the WIPP site and flowing into Nash Draw.

The Department of Energy must account for this water. They have been allowed to model the WIPP site only so far as the WIPP site boundary and to ignore all natural features beyond the boundaries.
I stood in knee deep water, rushing by me, flowing into the salt lake with such velocity that I could barely keep my footing. Admittedly this is after a major rainstorm, but that is exactly the point. A Karst spring will fluctuate with rainfall and these are Karst conditions.

Do I have any time left?

PRESIDING OFFICER: Yes.

RICHARD HAYES PHILLIPS: So where does this water come from?

I have a cross section that will show you the geologic strata in the area of the WIPP site. The salt lake is here and the WIPP site, the actual repository, is located here. This is the zone in which potash mining occurs. The middle Salado or the lower Salado, I should say, Salado salt, is where the waste is to be implaced.

The aquifers of concern are in the Rustler Formation and also in the Dewey Lake Red Beds, which have sandstone and siltstones which overlie the Dewey Lake.

Let me explain what the WIPP site looks like.

Actually it's a very beautiful land with sand dunes of pink
21 gypsum sands, Yucca, Mesquite Bush, Scrub Oak. There are up
22 to 14 feet of surface sands that overlie the WIPP site in
23 dunes and depressions.
24 Most rainfall among the 15 or so inches a year that
25 fall on the WIPP site come in fairly small showers. If it is
small enough, most of that water will evaporate. Some of it will infiltrate into the sands which are of course transmissive to water.

On indication though you get torrential rainstorms, but the ten inches in two days that fell in 1986 when I was there doing my dissertation field work, that water if the rainstorms are torrential enough, might saturate the sands, allowing surface runoff.

So there are occasional arroyos at the WIPP site that carry water only after the major rainstorms. Maybe every five or 10 or 20 years or so, and this water will be carried into sink holes and will disappear underground.

PRESIDING OFFICER: Dr. Phillips, your ten minutes are up. Can you conclude?

RICHARD HAYES PHILLIPS: No, I cannot conclude soon, so I guess I'll have to stop now and see what happens.

UNIDENTIFIED SPEAKER: Will anyone yield time to Dr. Phillips so he can finish?

UNIDENTIFIED SPEAKERS: I will.

PRESIDING OFFICER: Well I'm happy to do that. I
want to walk my way through, since people were kind enough to call us and we scheduled folks, we'll work our way down the list, and if people want to yield Dr. Phillips, we'll let him continue.

Next is Eric Rajala.
ERIC RAJALA: I'd be willing to yield some of my
time to Dr. Phillips.
PRESIDING OFFICER: Well, do you want to make a
statement also? I have a feeling Dr. Phillips want to
continue but for more than a couple minutes, so if you have
your own statement to make you should do that and see if
there's any other time.
ERIC RAJALA: My name is Eric Rajala, and my only
qualification is that I was born here, lived all my life
here. I was raised in Los Alamos, actually.
For 50 years now we have generated radioactive
waste and we did this at first in the name of national
security. Little thought was given to the cost of the
national security project and virtually no thought was given
to waste disposal.
The history of the site such as Los Alamos and
Rocky Flats and others speaks for itself on the subject. We
must readjust our sites for the future of 10,000 years from
now. But we lack the political will to spend the money to do
this, the way we had the will to spend the money to create
the waste.

For 50 years our poor containment procedures have been good enough, or so we're told. Well, 50 years is only one half of one percent of 10,000 years which is a minimal amount of time for a mature, responsible civilization to
reckon with when considering nuclear waste disposal.

Now you are cutting the budget, I'm told, and just putting the waste in America's backyard, throwing it away in a state that lacks the political power to do anything about it. What we really need is another Manhattan project to solve the waste problem that began with the first Manhattan project.

Nuclear waste disposal is unlike any other problem human beings have ever encountered. The only guarantee we have is that natural processes such as what Dr. Phillips was talking about will cause the site to deteriorate over time.

Our record over the last 50 years does not inspire my confidence about what will happen in the next 9,950. We can't even adequately maintain our highways here in New Mexico. We have no guarantees that our highways will be upgraded and maintained just for the WIPP project.

We don't believe that WIPP has or even could solve our waste disposal problem. Unfortunately there's no glory in being a garbageman. The greatest thanks that we will get for doing this job right will be from our descendants. I ask
21 you, what will they think of the WIPP project after 10,000
22 years.
23 I ask the EPA to disclose the names of all of the
24 technical support contractors, their qualifications and the
25 technical issues that they worked on, so that at the very
least their names can go down in the role of history so that people will know who was responsible for this. That's why I'm here. Thank you.

PRESIDING OFFICER: Is there any time left over?

TIMEKEEPER: Yes, we do, 2 minutes 21 seconds.

PRESIDING OFFICER: Okay, thank. Dr. Phillips, how much additional time do you think you're going to need? I think it would make sense to do it in one lump rather than two minutes here and there.

RICHARD HAYES PHILLIPS: Sure.

PRESIDING OFFICER: I'm just trying to go get an idea.

RICHARD HAYES PHILLIPS: Well, let's see how much time ends up available.

PRESIDING OFFICER: Okay, why don't we do that. I think that's the best thing to do.

Next is Thomas Metcalf.

THOMAS METCALF: My name is Thomas Metcalf, and after 20 years of hearings I would like to yield my five minutes to Dr. Phillips.
PRESIDING OFFICER: Okay.

Next is Maria Santelli.

MARIA SANTELLI: I would like to yield Dr. Phillips my time.

PRESIDING OFFICER: Okay.
Next is Robin Seydel.

ROBIN SEYDEL: My name is Robin Seydel, and I, too would like to give my time to Dr. Phillips since the DOE and the EPA don't seem to listen to the good citizens of the state anyhow.

PRESIDING OFFICER: Next is it Dorrie bunting.

DORRIE BUNTING: I'm Dorrie Bunting, and I'd like to give my time also.

PRESIDING OFFICER: Okay. Next is Lee Sims.

LEE SIMS: I'm Lee Sims and I give my time to Dr. Phillips.

PRESIDING OFFICER: Next is Sylvania D'Ouville.

SYLVANIA D'OUVILLE: I give my time to Dr. Phillips.

PRESIDING OFFICER: Okay.

Next is Van Smith.

UNIDENTIFIED SPEAKER: Van Smith is sick but he called the EPA hotline and seated his time to Dr. Phillips this evening.

PRESIDING OFFICER: How about Bay Woods.
BAY WOODS: I'm Bay Woods and I also seat my time to Dr. Phillips.

UNIDENTIFIED SPEAKER: Let him speak now. Please don't do this anymore.

UNIDENTIFIED SPEAKER: You've got enough time
there.

PRESIDING OFFICER: That's why I tried to find out
before how much time he thought he needed.

RICHARD HAYES PHILLIPS: That should be enough
time.

UNIDENTIFIED SPEAKER: Let him speak this time and
then other people can speak.

UNIDENTIFIED SPEAKER: How much time does that add
up to?

PRESIDING OFFICER: You've got about 50 minutes.

RICHARD HAYES PHILLIPS: This will actually put us
ahead of schedule.

PRESIDING OFFICER: Okay, let's go.

RICHARD HAYES PHILLIPS: Here's another geologic
cross section. This one is easier to see because it's a
different scale.

Here is the edge of Nash Draw, a drill hole called
WIPP 25. This in the cross section has a drill hole called
WIPP 33. This was the first Karst feature east of Nash Draw
admitted to by the Department of Energy.
WIPP 33 was drilled in 1979, because it was suspected of being a collapsed sink, partly because there is an arroyo disappearing into it.

The Department of Energy drove WIPP 33 and found not one but five underground caverns in a nested sequence,
one on top of another with rocks separating them, a total of
nearly 30 feet from top to bottom in the five caverns. We
are talking about five water filled caverns, an average of
six feet from top to bottom, big enough to scuba dive
through.

If one looks at the WIPP site aerial photographs,
which I do have with me if anybody want to peruse them after
the hearing, you can see that WIPP 33 is one of a chain of
four surface depressions, and so as an earnest graduate
student, I placed nearly 350 auger holes in the region by
hand as much as 22 feet deep to probe the subsurface and to
see if the supposed waterproof barrier of Mescalero caliche
actually existed or if maybe there were subsurface
depressions in the caliche as well that would be catchments
for rain water.

I have determined from this that these were indeed
structural features, that this is a chain of four sink holes,
which is what you would expect, lined up above an underground
water course.

WIPP 33 used to be in the WIPP site and then they
reduced the boundaries of the WIPP site without moving the waste disposal area. So the WIPP site isn't any farther from karst than it used to be, just the boundaries are different. But all three of these depressions are closer to the WIPP site boundary than the original one which was drilled.

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The Department of Energy finally this year in its response to CARD admits that these are all sink holes and that proven Karst features extend within 1,000 feet of the current reduced WIPP site boundaries.

Now, when I was doing dissertation field work, as I said, ten inches of rain fell in two days. That was enough to saturate the surface sands and allow water to flow through this arroyo and into the WIPP 33 depression which is 700 feet in diameter, 30 feet deep with 40 feet of sediments washed in. So it's really 70 feet deep.

I saw five feet of standing water in that depression. The water carried in some organic debris left along walls of the depression what I would describe as a bathtub ring.

So even years ago later when I brought EPA officials there to see this feature, the evidence of high water mark was still there.

I saw five feet of standing water infiltrate into the sands and disappear into this sink hole in about two days.
I also saw another arroyo suddenly appear on land surface that wasn't there before, was not in the previous aerial photographs, which is what I saw on this map, and it disappeared into this depression which I have previously identified as a sink hole. So of course now these are proven.
Karst features east of Nash Draw. You can see them in cross section here. Of course, there's a vertical exaggeration as always in geologic cross sections.

Here's WIPP 33 and you can see that the one 2,000 feet farther east, which also now has a disappearing arroyo looks almost exactly the same.

Much farther east of Livingston Ridge is another depression almost exactly the same size as WIPP 33. This was drilled as WIPP 14.

The Department of Energy in its response to CARD actually fell short of denying this is a sink hole. They made a few arguments but didn't actually deny that water flows into WIPP 14 and disappears into the depression.

Now, the WIPP 14 drill hole is 98 feet outside the WIPP site boundary, but the depression is 600 feet in diameter. It straddles the WIPP site boundary. This is Karst within the WIPP site.

This is a topographic map that I constructed by surveying the depression. These are one foot contour intervals, it's about nine feet deep, 600 feet in diameter.
21 Then going to the Caliche surface, I could then subtract the
22 distance from the surface to the caliche, and map the caliche
23 surface.
24 The EPA has quite rightly objected that the
25 Department of Energy did not provide to them any maps of the
Mescalero Caliche surface in the multi-thousand page CCA.

There are 16 of them in my dissertation. This is one and the shows that beneath WIPP 14 indeed this is a structural depression as well in the Caliche surface.

This is not hard cemented Caliche. This is powdery Caliche that is breached by rainwater leaving only remnants pockmarked with solution features.

Now beneath the Culebra dolomite at WIPP 14 and the Culebra is believed to be the most transmissive member of the Rustler formation, the Karstic groundwater formation.

Beneath the Caliche at WIPP 14 is 71.4 feet of mud containing fragments of gypsum and anhydrite. It's not solid rock at all. CARD interprets this as cave fillings beneath an obvious sink hole and the Department of Energy has yet to offer another explanation.

I did notice in the CCA that there's a statement which says that there isn't much dissolution east of Nash Draw. There are a few clusters of small dolens or sink holes east of Nash draw. And that they are in a prong of disillusion extending east of Nash Draw to WIPP 14.
The Department of Energy knows that this is a Karstic groundwater flowpath from WIPP 14 to Nash Draw. I'll get back to that in a minute.
The Department of Energy has performed multi well pump tests at the WIPP site. They have almost 40 test wells.
now mostly in the wrong locations. I hasten to point out
that even though open caverns were discovered at WIPP 33, and
a mud filled cavern was discovered at WIPP 14, these were not
turned into hydrologic test wells.
The Department of Energy never collected hydrologic
data in known Karst features at the WIPP site. Even so, they
have discovered hydrologic connections between certain drill
holes.
Last year I pointed out these three in the
northwestern part of the WIPP site and these 33 in the
southeastern part of the WIPP site.
I have since come upon a report that acknowledges
that this highly transmissive groundwater flowpath passes
between these two drill holes and turns into Nash Draw to the
H7 collapsed sink where another nested sequence of six
caverns was discovered. This is one of the flow paths
identified by Dr. David Snow and myself last year. We now
have further evidence to support it.
We also identified a groundwater flowpath coming
from the center of the WIPP side north eastward to drill hole
21 WIPP 13. We have no such discovered that the Magenta
dolomite in the Rustler formation which the Department of
Energy has told EPA was not fractured in the vicinity of WIPP
is, in fact, broken and shattered at WIPP 13.

25 The tamerisk member between the two dolomite
aquifers which have long been considered the most transmissive members of the Rustler formation. The tamarisk member is shot through with interconnected vertical fractures connecting the Magenta and Culebra at WIPP 13. I found this interesting because David Snow and I had identified one flowpath flowing this way and another flowpath coming from WIPP 14 this way as evidenced by DOE's own multi well pump tests and then flowing out to the vicinity of H6, the WIPP 33 sink hole and out into Nash Draw at WIPP 25. Now, the reason that -- let me state it another way. If you were to view this in map view, you would see two groundwater flow plus merging at WIPP 33. One coming from the WIPP shafts, one coming from the WIPP 14 sink hole and then merging and flowing this way. But the Culebra dolomite is already saturated at WIPP 13 and it cannot hold the additional water. So the water rises up into the Magenta dolomite which the DOE refuses to model and refuses to admit is a groundwater pathway. CARD predicts that if the DOE would measure the
hydraulic heads in the Magenta at WIPP 13, that's the level
to which water rises in a cased well, they would find that
the hydraulic heads for the Culebra and the Magenta are equal
at WIPP 13 as we know they are equal at H6 and at WIPP 25.

By the way the caverns at WIPP 33 were all in the
Magenta dolomite at the higher. Two open caverns in the Magenta, two open caverns in 49er gypsum above that, and the open cavern in the Dewey Lake Red Beds. These are obviously groundwater flowpaths. These are water filled caverns six feet high on the average from top to bottom.

Anyway, we have discovered another multi well pump test at WIPP 13. It turns out that WIPP 13 is connected to Nash Draw. When they pumped water out of WIPP 13, they measured the water levels in a number of wells to see if there was a response, if that water level dropped as well. Then they stopped pumping at WIPP 13 to see how long it took for the water levels to raise again in other wells. These wells are four miles away. The response time was 26 hours. This is an existing hydraulic connection between WIPP 13 deep within the WIPP side where the Magenta dolomite is shattered, and WIPP 25 which is in Nash Draw which even DOE admits to be Karst. More frightening than that, there was also a response time in one of the WIPP shafts in the center of the WIPP site. They measured a response there.
The Department of Energy's own multi well pump tests showed an existing hydraulic connection between the WIPP shafts in the center of the WIPP site and one of the largest Karst features in the world, Nash Draw. I know the Department of Energy says in their
Supplemental Environmental Impact Statement that groundwater flow at WIPP is unrelated to groundwater flow at Nash Draw. This statement has always been unsubstantiated and now it is disproven.

These are highly transmissive zones of water.

These are transmissivities, the ability of the Culebra dolomite the to carry water measured in square feet per day.

You can't draw contour lines. They don't vary randomly. There are discrete paths that have the highest transmissivities, I have marked them in bulls eyes, the same test wells that were shown to be hydraulically connected.

The Department of Energy collects such data and then discover that the groundwater velocities from test well to test well vary by a factor of one-millionth times, and they treat this as random variables.

They punch them into a computer and they do numbers crunching and they assume that any transmissivity will be randomly encountered at any given bore hole.

I'm a geographer. I got my doctorate in geomorphology from a geography department. When I novelist
data that doesn't seem to fit with the rest of it, I ask where.

So I also correlated all of the bore hole data from all the WIPP bore holes and discovered that there were zones both above the Magenta dolomite and below the Culebra
dolomite in members of the Rustler formation that were
thought not to be a problem, not to be part of the
groundwater flow system.

These zones were characterized by consistent
inability to recover a core sample from the drill hole
because the rocks were so unconsolidated. Sometimes there
were complete washouts where the drilling fluid was lost as
it flowed into those cavernous zones, and as you see, they
snake entirely across the WIPP site, including most of the
drill holes I have already shown you.

So that opens one more question about shallow
groundwater hydrology. If there are cavernous zones snaking
across the WIPP site, penetrating the WIPP shafts and
connecting to Nash Draw, are these ancient features left over
from the ice ages or do they carry water today?

There's a surface depression one mile long and 900
feet wide narrowing to 200 feet wide as one heads westward
toward Nash Draw. This is the WIPP site boundary right here.

Most of this -- well, a large part of this depression is
within the WIPP site.
Again I put in an array of hundreds of auger holes to test the subsurface, and then I came in with a backhoe and dug trenches as I did at WIPP 33 and 14 to expose the Caliche surface, to see once and for all what it looks like to see if it's a waterproof barrier everywhere present and everywhere.
preventing rainwater infiltration.

I found that the Caliche resembles Swiss cheese. It has fractures, it has holes. The holes usually started where a plant root penetrated it and rainwater would flow along the hard cemented Caliche surface until it found a hole. And it would enlarge that hold by dissolving the limestone as it did so.

I found that about 15 percent of the Caliche was missing. It is not a barrier at all to rainwater infiltration. In fact, it actually helps, because the rainwater flows along the surface, infiltrates into these holes at which time it seeps through the Dewey Lake Red Beds underneath the Caliche where that hard cemented Caliche protects it from evaporation.

Now, the Department of Energy told the Environmental Protection Agency that the Caliche is a cemented surface and that it is typically present at the WIPP site. An umbrella with holes in it is typically present but water still gets through.

In the Department of Energy's response to CARD,
they did not deny that the feature I just showed you was a Karst valley. They didn't even respond.

Now, if you're going to have any basic rudimentary understanding of a hydrologic system, you have to know where rainwater recharge occurs and where groundwater discharge
I showed you that the water discharges into Laguna Grande de la Sal, the big salt lake, but the Department of Energy has given a number of explanations which are basically guesses as to where recharge actually happens.

Again they should map their own data. This map shows two things. It shows in numbers the amount of dissolved solids in Rustler groundwater in the Culebra dolomite member of the Rustler formation. And it also shows in bulls eyes test wells in which the overlying Dewey Lake Red Beds were found to contain fresh water.

It is interesting that they all cluster right here at the center of the WIPP site and southward. This is the rainwater recharge area. That's why the water in the Rustler formation has small enough concentrations of dissolved salts as to be classified not even as brine.

Most of it is not fresh water but it is not brine.

It is certainly mixed with fresh water, with rainwater recharge. We know now that the Dewey Lake Red Beds has open fractures throughout from top to bottom as evidenced at the
H3 test well where water was found streaming from an open fracture in the Dewey Lake Red Beds only 35 feet above Rustler formation.

So if its dune sands are not a barrier to infiltration and if the Dewey Lake Red Beds are not a barrier
infiltration and if the Mescalero Caliche is not a barrier to rainwater infiltration, there's nothing preventing rainwater from reaching the Rustler formation. That is why the Rustler water in the area which I have mapped as the recharge area is so much fresher than water in the eastern part of the WIPP site.

Now there is another way of looking at this. Why does the rainwater recharge happen there? In some parts of the WIPP site, there is another sandstone formation called the Santa Rosa sandstone. It doesn't block rainwater but it does inhibit it. And it exists only in the eastern part of the WIPP site, right here.

These test wells that show fresh water in the Dewey Lake Red Beds, often potable water I should add, all cluster where the Santa Rosa sandstone is absent, where the Dewey Lake Red Beds are in direct contact with Mescalero Caliche or if the Caliche has holes, in direct contact with the dune sands.

I showed this map last year as well. These are encounters of potable water at or near the WIPP site. I know
they want you to believe this is all brine and that it can't
be used for anything but stock water. But there have been a
number of encounters of fresh water, drinkable water in and
near the WIPP site in both the Dewey Lake Red Beds and the
Rustler formation.
Now, the Department of Energy says this doesn't matter because their computer models show that radiation will never get into these under groundwater aquifers and, therefore, they are not potential pathways. It doesn't matter whether this water is drinkable or not.

Here we have a map showing dissolved salt, sodium and chloride, and we see, as would be expected, that in terms of milligrams per liter the water in the Culebra dolomite gets fresher and fresher as one gets from the eastern side of the WIPP site to the western side of the WIPP site toward Nash Draw.

This is consistent with the interpretation that the rustler formation becomes more and more Karstic as one goes toward Nash Draw. What does that mean? That more and more rainwater infiltrates into the Rustler formation and into the underground caverns such as those found at WIPP 33.

Over time, some of those caverns get bigger and bigger and carry more and more groundwater while the other caverns get choked off. So you have more and more groundwater flowing through fewer and fewer, larger and
larger underground caverns over time.

A Karst area does not become less Karstic, it only
becomes more Karstic.

I know that the Department of Energy in a response
to a legitimate concern by the EPA not to worry that there
are gypsum fillings in the fractures, not to mention the
caverns in the Rustler formation. But don't worry, this
gypsum will not dissolve because the water that might
dissolve it will be saturated with gypsum. Let's use our
heads here.

Rainwater is not saturated with any mineral. It
becomes saturated with gypsum only when it dissolves enough
gypsum to become saturated. It is absolute folly to assume
that these fractures will not become larger over time, that
the fillings will not be dissolved away, that gypsum caves
such as found at WIPP 33 will not become larger over time.

Another indication that water flows westward toward
Nash Draw is shown here. This is basically a famous map.

There are at least 21 reports of scientists working
independently of each other who have concluded that the
reason that the Rustler formation is 200 feet thicker at the
western part of the WIPP site than it is at the eastern part
of the WIPP site is because the salt has dissolved away. The
rainwater has infiltrated to the Rustler formation to
dissolve that salt and carried it away and it ultimately ends
up in the salt lake.

The Department of Energy quotes the studies of

Dennis Powers and Robert Holt who work together as a team,

they are both on the DOE payroll, and they are the only ones

of whom I'm aware who deny this. Who say that the salt and
the Rustler formation was never deposited in the first place, therefore, it was never dissolved away, not to worry, there's never been any disillusion in the Rustler formation. How then did concentrations of dissolved salt at 11,000, 13,000, 18,000, even 45,000 milligrams per liter, that is four and a half percent, how did that much salt end up in test wells in the Rustler formation where there's no salt in the Rustler formation? The salt has all been dissolved away across the western part of the WIPP site. Not only that, but some of the top of the Salado salt has been dissolved away at the WIPP site, and the Department of Energy denies this too. They are denying the validity of their have own bore hole data when they make statements like that. There are seven test wells and one WIPP shaft east of Nash Draw that show that the top of the Salado salt has dissolved as well. And the Rustler formation contains no salt at all across almost half of the WIPP site and contains salt only beneath the Culebra dolomite, the most transmissive member across most of the rest of the WIPP site.
Very briefly, why does this matter? How could contamination get from the WIPP site up into the Rustler formation which is above the repository? Here's another cross section. Again, vertically exaggerated as all cross sections are. Here's the repository level.
Here's the Rustler formation which the Department of Energy models as containing three waterproof units that prevent water from getting into the Culebra dolomite. They refuse to model it the way it really is in the real world, one complex system of underground streams, even rivers flowing up, down and sideways containing five members. It has to be viewed in three dimensions.

What they say is only the Culebra dolomite at about this level of the Rustler will carry groundwater and that waste can never get up from the repository into the Culebra dolomite and, therefore, the WIPP site is safe.

We know that underneath the WIPP repository is a high pressure brine reservoir. It was actually penetrated by the WIPP flow drill hole one mile north of the center of the site. It's an Artesian brine reservoir. That means it is under so much pressure that it gushes to the land surface. It can even blow the equipment out of the hole and cause a lot of damage. And it flows for days and days and days until the flow stops.

The WIPP lives or exists in a known oil and gas
21 district. There are 120 oil and gas wells right now within
22 two miles of the WIPP site boundary. The Department of
23 Energy cannot control this site forever.
24 As soon as the oil and gas men can drill within the
25 WIPP site boundaries they will. They will drill right
through the waste panels and they will penetrate this high
pressure brine reservoir before they ever get to the oil and
gas.

Maybe some of these oil drillers will properly case
the drill hole and plug it according to New Mexico law. If
they do, then that brine will have plenty of time to flood
the WIPP repository, corrode the steel drums and dissolve
the waste and create a slurry of radioactive waste and salt
brine.

Brine means water that contains so much salt that
it can't dissolve anymore salt, and so it can't enlarge the
tunnels of the WIPP site, it can only go up the shafts or up
the drill holes.

I found out lately that the Department of Energy
attempted to seal three of their access shafts which were up
to about 20 feet in diameter, and within two or three years
three of those seals failed and water seeps in from the
Rustler formation. They tell us that their next attempt at
sealing the shafts will last for 10,000 years.

Also, when the oil and gas men have extracted most
of the oil from an oil field, they then engage in what is called secondary recovery. They inject high pressure brine deliberately into the well because the oil is lighter than the salt water. And it will force that oil higher up into the well and make it easier to extract.
There was a case in southeastern New Mexico not long ago where a man named Doyle Hartman, was drilling for oil, and when he reached the Salado formation, the same salt formation in which the repository is built, he encountered pressurized brine that caused a blowout in his drill hole and cost him millions of dollars.

He sued Texaco for having injected brine at high pressures two miles away which caused the blow out, and Mr. Hartman won the case.

We know there are anhydrite beds in purees in the Salado salt, the same beds which exist directly above and beneath the repository within four feet of the floor, which are known to be able to carry high pressure brine for at least two miles and blow out a drill.

Remember, there are 120 oil and gas wells right now within two miles of the WIPP site. Three of them have been approved for brine injection. So if this repository floods with high pressure brine that dissolves the 55-gallon steel drums, corrodes them rather and dissolves the waste, you will have a high pressure slurry of brine and waste just waiting
to be penetrated by the next drill hole which could bring a
large amount of the waste to the surface or to the Rustler
formation, which then would travel through underground
caverns all the way to the salt lake, which in times of major
flooding overflows into the Pecos River.
The Department of Energy must not be allowed to stop their analysis at the WIPP site boundaries, to ignore the salt lake and the Pecos River, because that is what allows them to underestimate the amount of groundwater by 100 times.

They must account for that salt lake. It exists. You can go there. You can see it. They must account for that water. It comes from somewhere and it can only come from the Nash Draw watershed.

Plutonium will be able to travel at the speed of water through underground caverns. Picture it this way, the larger the cavern, the greater the volume of water compared to the surface area of rock on the walls of the cavern. Some of those radionuclides will travel unretarded at the speed of water and start arriving in the salt lake in as little as five years, certainly no more than 100 years from the time that the site is breached. And then in times of major flooding, those radionuclides will be carried out of the salt lake and into the Pecos River where the people live and they'll be carried out all at once.
I know it fluids into the Pecos River. We have measurements of the high water stage of the Pecos River and I've also walked all around the shore of the salt lake which is how I found that stream flowing into it from a spring fed smaller lake to the north.
I looked at the salt crust above the lake level and
I measured the high water mark that is indicated by the top
of that salt crust and it is exactly the same elevation as
the irrigation ditch that breaches a 10 foot ridge between
the salt lake and the Pecos River.
I want the Department of Energy to start living in
the real world, to stop hiding behind computer screens and
overworking their data set, treating the numbers as random
variables and doing numbers crunching in order to come up
with the desired conclusion.
CARD has presented the first conceptual model of
regional water groundflow that is consistent with all
observed data, not just some, not just the convenient parts,
not just the parts that are not easily explained, not just
the part that fit a desired conclusion.
Even the peer review panel and even the DOE knows
that they don't have a model that fits the data. That's
because they won't admit that the WIPP site is in Karst
because Karst is a fatal flaw. Thank you very much.
PRESIDING OFFICER: Thank you Dr. Phillips.
Next is it Dave Mitchell.

DAVE MITCHELL: All right, Richard I get to follow you. Well, my presentation is a little more cavalier. Let me see if I can keep on track.

First of all, with respect to WIPP, I think I have
here the Department of Energy's response to a number of CARD's -- my name is Dave Mitchell and I'm a member of CARD, and my name is not prominently but there with Richard Phillips in some of these technical reports that have been submitted to the Department of Energy and this is their response to those.

First of all I'd like to say that the undisturbed scenario, the undisturbed condition for the WIPP site is an oxymoron. There's no such thing as the undisturbed condition. We always hear about the WIPP site being in bedded salt lakes that were created over millions of years, and they've been there for millions of years and that's why it's so good to put this in there because it's been there for so long undisturbed. We now have four giant drill shafts that go through all of these geological structures that have been there for millions of years, and it's fractured all the rock and it's crumpled up and that's what's known as the disturbed rock zone. And in the response -- the question was raised -- well, the question has come up over and over again how affective are the man-made seals that are going to be put
back into these shafts. The Department of Energy continually says oh, the seals are going to work. For purposes of our high-tech mathematical modeling and functions, the seals will work. Oh, but we're going to be continuously redesigning them for the next 20 years. That's in here.
I'd like to say that there is no evidence that mankind has ever come up with anything to seal geologic structures. It just hasn't happened yet, according to some experts.

I think you from EPA are probably familiar with the old acid test in southern California. That's where a bunch of scientists got together and came up with high-tech math models and said we can safely isolate that toxic chemical waste in the geology. Of course, now you have the largest superfund problem and it is leaking into and contaminating drinking water wells in the southern California basin.

With respect to their response, the question was raised what about the high appreciate gas? You compress all of this waste and the steel and salt started coming together and starts generating it's own gas, plus the walls crunch in, ore comes up and you're compressing the volume of this air and gas is being generated to 146th of it's original volume and creating immense, immense pressures.

Well, the Department of Energy in their response says all that gas is going to be absorbed by the anhydrite
later that Dr. Phillips mentioned, and there is no mention
made of well, is that high pressure gas going to make its way
up through the stirred rock zone.

They never make the comparison that the high
pressure gas goes in the anhydrite but it doesn't go into the
stirred rock zone. They never address it in this response that I could find. So I think they need to do that comparison, for one. The assertion then is that the high pressure gas is going to open up fissures in the shaft seals and then the brine is going to follow and is going to be whisked off, as Mr. Phillips so eloquently described, off into the Pecos River ultimately.

I always like to say that digging a hole and stuffing waste down into it is a 5,000-year-old solution to a 50-year-problem. We haven't had to deal with nuclear materials but for the last 50 years of our existence, and to put that into perspective, and I described this to Secretary Pena and I'll tell it to you, a nuclear reactor when it gets shut down has to sit there for 100 years while the cobalt 60 decays to a safe enough level that humans can get in there and dismantle the core and take it off. Well, we haven't even reached the first 100 years of having nuclear materials in our existence yet we're racing to dump this stuff down a hole in the ground. Again that's what humans do, they bury their waste, like I say.
The other thing that gets dismissed, our ninth paper to the Department of Energy was basically a cry for a error analysis on human errors. The response is, and the ninth paper dealt with human error, both issues unrelated to DOE's CCA. In other words, there will never be a human
error. Forklift trucks will operate perfectly, everything is
going to go smooth, they'll always clean up. They will
always -- I love this, if there is a spill, all of the
radionuclides being a little bit warmer than the cool
surfaces of the wall played out immediately, and that gives
the workers enough time to run out of the building.
That's -- anyway.
So there is never going to be any errors, no human
effects. They dismiss that right away. And they also poo poo
all the time when CARD says, well, what's this rush, there's
new technology that's going to be developed that we can't
even imagine in the next 100 years. Why are we building
subterranean shallow tunnels far less expensive, maybe
another tunnel underneath that to monitor seepage, and store
all the barrels in there just under the surface at this
generator site so we don't have to go trucking it all over
the country, and wait for new technology to be developed.
I just read in one of the scientific journals about
something called the plasma car wash. Have you guys read
about this yet. Apparently Los Alamos, bless them, has
figured out a way to reorient the electron orbitals in a
plasma. A plasma is a highly ionic, high temperature mix of
gases which is the predominant substance of universe, and
they've never been able to make it exist in anything other
than a vacuum, but they figured out a way to do this and so
you have a plasma that exists in open air for a few seconds.

That plasma ark, that jet, the specific purpose for this

thing, and they are building a bigger prototype now, is to

sweep heavy equipment that's been contaminated with plutonium

and instantly ionizes the plutonium and then it's sucked off

and then trapped in a filter.

Well, half of the volume of WIPP is scheduled to

receive contaminated heavy equipment from the Hanford site.

You just made with an advance in technology that occurred

last year, half of WIPP obsolete. It's already happened. So

why (applause) -- the assertion that there's no other

technologies and this is our best solution of 5,000 year old,
dump it in the group, forget about it, it doesn't wash. It

doesn't wash.

So my final comment is we were preparing an

educational video to show school kids that yeah WIPP, there's

something in New Mexico that's called WIPP and this is what

it looks like. And we picked out a little clip of a CBS

video. And we were going through it and I said wait, wait,

wait, back that up. Let's look at that again. I just
couldn't believe it, because in the Waste Acceptance Criteria
for these barrels of waste it clearly says there will no free
liquids. So the journalist that shot the various clips
happened to be in the room where they were x-raying the
barrels and they were spinning the barrels around, and the
one barrel they happened to catch on video, if you look at
the x-ray monitor and you look inside the barrel, they zoom
in for a split second and inside that barrel you see an
inverted bottle. And inside the inverted bottle is this
little bit of liquid that is floating around in there.

I said, now, get out your -- you've had statistics,
what are the statistics, what is the probability of how many
of those barrels have free liquids in them if you could just
take a purely random sample by a journalist that happened to
be looking at the monitor at the time and extrapolate that.

So the point of that story is that EPA, if there's
anything that they have stuck to their guns on, it's been the
waste characterization problem. You've got all this super
high pressure stuff being mixed together down there and you
guys have consistently insisted at the DOE's objections that
you've got to sort that stuff more carefully. You've got to
keep particular types of toxic chemicals, hazardous wastes
and things that could react severely, away from each other
and I'm just asking you to stick to your guns on that.

And -- where's Ramona, by the way?
PRESIDING OFFICER: She has another job now.

DAVE MITCHELL: Another job. Within EPA? See Ramona made the big stink when we started talking about the shaft seals and all that.

Anyway, stick to your guns and hang on. Thank you.
PRESIDING OFFICER: Thank you.

Next is Joan Woodard.

JOAN WOODARD: I'm Joan Woodard. I'm the

vice-president for the Energy and Environment Program and

Sandia National Laboratories. It's my pleasure this evening
to speak for Sandia.

Sandia Laboratory supports the EPA draft rule and

believes that WIPP should be certified as a facility for

transuranic waste disposal. And that it can separate safely

and within the EPA repository standards.

Sandia has had responsibility for the scientific

evaluation and aspects of WIPP since 1975. This represents

the longest continuous scientific project at Sandia

Laboratories.

Over that time WIPP has received more intense

scientific study and scrutiny than any other comparable

project in this country and internationally.

Sandia's convinced that WIPP is well understood and

can provide containment from more than the 10,000 regulatory

period. Scientific programs has utilized recognized experts
and been conducted openly and consistently with the scientific principles of peer review. There have been extensive publications in professional journals with peer review. There's been oversight by the National Academy of Sciences as well as by
In addition, there's also been extensive national and international review groups. All of these groups have made valuable and accepted recommendations that have enhanced the confidence and compliance. Concern has been involved in the technical process in many different ways, including attendance in the technical information exchange room with EPA. Sandia's evaluation of compliance has been conservative to provide additional confidence to long term predictions. Further the EPA designed assessments with even greater conservatism still showed WIPP to comply with a large margin of safety even in the unlikely event of human intrusion. Sandia's review of the EPA draft rule has convinced us that EPA thoroughly understands the issues and has addressed the issues in a conservative way. National and international scientific review groups support the certification and operation of WIPP. Sandia concurs that WIPP can safely isolate waste for well beyond
the regulatory 10,000 year period.

Additional scientific study is not required to
allow EPA to certify WIPP, already the most intensely studied
and understood facility.

In conclusion EPA should certify WIPP for receipt
of transuranic waste without further conditions than those
imposed in the draft rule. Thank you.

PRESIDING OFFICER: Thank you.

Is Allan Cooper here?

ALLAN COOPER: My name is Allan Cooper, and I'll be
very brief.

I read an article in the paper about how supportive
the people in Carlsbad, New Mexico are concerning the WIPP
project, and I can tell you that I did door-to-door work in
Carlsbad several years ago and it wasn't as overwhelming as
you think.

There are a large number of people that live in
that community as well as in Albuquerque and other
communities, that are dismayed like I am and are not
participating in this hearing.

If I lived in Carlsbad, and I have been lobbied to
the tune of $1.5 to $1.7 billion, I might be in support of
the WIPP project too, because that's how I see it. It's the
kind of buying off of a community. I have a ten-year-old
son. His name is Malcolm, and I feel like I'm standing here
And I'm standing here in behalf of a lot of people that I know who are not in the audience. I know a lot of people here and a lot of people who are not here. And without being too presumptuous, I've got to tell you that I
feel -- I've been in front of you at these kind of hearings about three times. I've been against the WIPP project from the beginning, and I feel real deep kind of cross between resentment and dismay because I feel the people I'm looking at -- and I know it's presumptuous, you don't really give a shit. That's how -- and I'm not performing for these people. I'm just telling you what's coming out of my heart. I feel kind of like it's a benign arrogant listening which is just nonlistening. I don't think you care. I think your minds are made up and for that breaks my heart, because as a traditional land based people feel, they feel like they have responsibility for seven generations, and that's where I'm coming from. I'm an ex-Christian who is sort of a cross between a Buddhist and Sweat Lodge Follower. I didn't get there easily. I guess what I want you to know is who I am, that I represent a lot of people who are not here. They didn't even consider coming because they don't think there's
any -- there was any value in coming.

I'm talking from my heart. I'm not talking as a

CEO or as a school teacher -- I've been a school teacher for

30 years, a private investigator for 20. I worked for Martin

Luther King in the 60's. I was in jail -- in the same
jail -- well, not in the same jail because they were segregated, but in the next cell over, so I'm coming to you representing a lot of people and I want you to know that. I don't know how much real power you have or if you're a window dressing, as many people feel you are. I'm not trying to put you down. I'm just telling you how the perception that other people have of this process, that it's not really a process it's just a formality. Yet I'm not performing, okay, I'm just talking from my heart. I started writing out all kind of notes and I decided not to write any notes and just to tell you what's in my heart. There are a lot of people, man, who are intelligent, caring, loving, compassionate, intelligent people who despise and are despised by the whole process of moving nuclear waste around. Just a couple -- last month trucks went across the country and they found out they were dripping all over the place. Does that tell you something? If you have any understanding of the nuclear fuel cycle, you've got to understand what we're talking about. I hope you understand...
21 what we're talking about.

22 I don't know who you are. I don't know your names.

23 I see names in front of you with titles. I guess that's it,

24 you know. I just want you to know that I'm here, that

25 there's a crowd, a silent, invisible crowd listening.
I left a group of friends tonight that I've been meeting with for six years, six of them, five are present tonight, Ike Benson, John Wright -- I don't know if I have the right to use their names in front of you -- but five people and they all patted me on the back and they said give them hell Cooper.

They knew about the hearings and they didn't come, and I think it is real significant because it is part of a process of disempowerment and people not feeling like we have anything left. We don't have any real political power and people bought into that for whatever reason, for a variety of reasons and are not here tonight. Because if the full power of people's feelings were being manifested by their bodies here tonight, you wouldn't be able to pack this convention center, okay, because that's where it's at. That's the attitude, that's the feeling.

It's a high dollar thing and it's going to go through because Domenici wants it to, among others, Domenici being probably one of the most politically powerful people in the western hemisphere now, and I'm really sorry that he's
21 sold his soul to the capitalist devils like many people have.

22 That's how I feel. It's all up to you.

23 I see you all looking at me intently, but I just

24 hope you heard it, because people are going to do everything

25 and there's going to be all kinds of things to stop WIPP.
We'll stop it. We'll continue to stop it because we care.

We've stopped it for what, 15 years now and we'll continue to stop it. (Audience clapping.)

We care about our future. We care about our children, man, our children. I say what I mean because I have a child -- actually I have several children. That's who I'm speaking for because they are not here tonight. They are in bed where they should be right now. Thanks.

PRESIDING OFFICER: Thank you.

I think I'm going to take about a five-minute break. We didn't have a break scheduled but we're going to be running for a while, I think. So for those who can't leave, let's take maybe about a five or ten-minute break and we'll start out in ten minutes.

(A SHORT RECESS WAS TAKEN.)

PRESIDING OFFICER: Let's get started again.

The person is Dave Pace. Is he here?

DAVE PACE: Good evening. My name is David Pace and I'm here representing the Central American Peace Alliance and obviously they don't focus on nuclear issues, but we had
talked to people in Central America who have had to deal with
us trying to ship our nuclear waste out there.
I really am very appreciative of people who put in
effort, Richard Phillips and Dave Mitchell, and I came in
late so I didn't hear a lot of well prepared statements.
I appreciate the effort that they put in, but I really couldn't motivate myself to put in a whole lot of effort because I, like Al Cooper, just don't have any faith in this process. We're organizing our own process outside of this because that's just what we believe it's going to come down to.

I read the comments DOE made about people who said that they don't trust the government. They just said we're not breaking any laws, they haven't broken any laws. And they didn't feel that it was important -- and I guess this was the document that you reviewed and said was sufficient, but they said that they hadn't broken any laws, they weren't breaking any laws, and they didn't make any mention of accident. Certainly there have been accidents.

Of what I know, there's Oak Ridge, Rocky Flats, Hanford. And I want to know -- we don't trust them because of these things. What have they done organizationally? How do address these problems? How are they going to assure that that doesn't happen again?

They didn't see fit to answer in that fashion. I
think that was just indicative of their attitude toward the
project.

And the woman who got up here from Sandia and said
they spend more resources on this project than any other
topic, why is it that Richard Philips, operating on a shoe
string, is the one that discovers the water flow pattern and
they don't know the water flow pattern after all the
resources they've put into it.

I worked at Sandia National Labs and I wasn't real
impressed. One of the things I thought about when I was
deciding whether or not to put in effort into trying to put
some analysis into the material that I've seen was, like I
said, that this process just is a farce. And I think that's
ture, just the whole nuclear process, the whole nuclear issue
and how much our government deals with it.

I mean, a month or so ago when the Chinese premiere
was here, we cut a deal to sell this guy 60 nuclear reactors
or something like that, because China was now a safe business
partner or they are going to act responsibly with these 60
nuclear reactors. For God knows what reason, but they are
going to do it so we're going to give them to them.

Then a week later I'm told that our nuclear arsenal
is going to be used to do deter chemical and biological
threats, and it's now going to be redirected at China.

It's hard to understand why we're going to sell
reactors and then we're going to point the missiles at them
because they're not safe. There's no sense to it and in
putting anymore effort into analyzing the materials that I've
had.
I've gotten feedback from the DOE and I looked at...
that and I didn't think that was very good. And then I read about how they put materials through a simulated crash test. They didn't crash it, they didn't burn it at the temperature that it could burn at if a crash, propane truck, because that would only affect part of the vehicle.

Well, that's what they assume. They assume that the propane fire is just going to surround part of the TRU pack, so what they do is they heat up to a much lower temperature.

Well, when we're dealing with nuclear waste flying down the highway with propane flying down the same highway and drunk drivers like no place else in the country, maybe you should go a little bit farther than you think would probably work.

So that's about all. I was really disappointed that the EPA went ahead and said that they thought that the Compliance Certification Application was complete.

It seemed pretty clear to me that Senator Domenici's threat of withdrawing funding from the EPA had something to do with that, and I don't know what else there
is to say.

Like Al said, there were a lot of people who just don't come because they don't believe in the process. And I'm just sorry it has to be this way and we'll work our own process, because that's just what needs to be done.
I'd like to thank Dave Mitchell for bringing up the issues of -- we've got new technology to deal with better than just shoving it in the ground. And Actually, I'm looking forward to watching your video.

I'd just like to thank the large number of people who came out here to voice their opposition.

PRESIDING OFFICER: Thank you for coming.

Kathy O'Neill.

KATHY O'NEILL: I'm Kathy O'Neill and I'm here representing CARD and myself and Central American Peace Alliance. And I work for MCI.

I'm not really sure where to start except to say that I was an air force brat and I was raised by an Air Force Colonel, so I have a lot of respect in many ways for the government and United States. But I've been really disgusted with what I've seen since I've moved to New Mexico in regards to this radiation threat.

I spent a lot much time since I moved here in a lot of different hearings and talking to a lot of different people about a lot of different issues concerning radiation.
21 And I'm finding out that there's a lot of little shady stuff
22 going on and a lot of people are being made promises that
23 aren't being kept, particularly people who have been exposed
24 to radiation at the DOE sites.
25 I know that the law states these people are allowed
compensation, that they should be getting compensation and
that they are not. Or that they are being but deals so that
no precedent is set so further more people can file suit and
get compensation.
I'm wondering a couple of different things. What
concerns me is if there's low level radiation leakage in
Carlsbad, why there hasn't been a baseline health study done
previous to the WIPP site, the opening of the WIPP site to
determine exactly what the status is down there of the
different kinds of cancers that are caused by radiation. Why
that money hasn't been spent.
People down there are owed that. They need to know
what they're up against. They need to know that the water in
Albuquerque is polluted from Sandia Laboratories, and that
children here are dying of Leukemia. And that people are
going brain cancer in Los Alamos.
And that only 20 percent of the waste that's
causing the problem in this country is going to go to WIPP
and that the rest of it is going to stay at the sites where
it is and continue to cause the same problems it's been
causing and people are going to continue to die of radiation poisoning -- of cancer.

It just appalls me. I can't believe it. The more I hear, the more I talk to people, the more I talk to downwinders, the more I talk to people who've been at these
sites, the more I hear about how they were lied to, how they
were told they would get compensation and they didn't get it.
How they were never even treated like human beings by this
government.

They are our sacrificial lambs. They are the
people that are dieing because of the cold war, I thought the
cold war was over.

We're very disappointed in this state because we
have no power. We have Senator Domenici telling us what
we're going to do and that's it. And you have Senator
Domenici telling you what you're going to do and that's it,
and we're tired of it. (Applause.)

All I can say is that I think that the EPA needs
to, if it's really going to address this issue, and I'm no
expert on environmental waste and no expert on nuclear waste,
but I know it is not being taken care of; and we all know
it's not being taken care of; and we all know that WIPP's not
going to take care of it; and we all know WIPP may become
another one the 90 percent of the DOE sites that are
contaminated and that more people may die of cancers because
of the radiation contamination. And we're very, very
concerned and we live here.

And please, before you start carting that shit down
there, will you do what you need to do to make sure that it's
safe. And if it's not, will you please do something about
what the stuff and where it is. It is killing people and we
don't want to be the next victims. Thank you.

PRESIDING OFFICER: Harry Willson.

HARRY WILLSON: Good evening. My name is Harry
Willson. I'm a writer, publisher, a father and a
grandfather, a husband, and other things.

When I signed up for this moment of testimony, I
didn't know that the period was reserved for experts. So
when I found it out in the paper, it said it was -- of course
the papers don't have it right always -- I asked myself what
kind of expert am I.

I'm not a specialist in geology. I honor your
work, sir, or mining technology or radioactivity or oncology,
all of which are appropriate here. I've become an expert in
not being a specialist. I'm a generalist, not to say,
pantologist. I make connections between compartments.

I've read in eager to jump across the boundaries
that create and separate the areas of expertise from each
other which causes the gross compartmentalization. What an
old psyche professor long ago labeled logic tight
When me wife and I visited WIPP last month, we were impressed in the sincerity and the compartmentalized thinking of the staff there. They have this mandate from the Congress quote, find a way to store nuclear waste underground safely,
They don't ask whether that is a good idea or what's the connection between that and preservation of the nuclear weapons arsenal, they just proceed with their mandates. They believe and they say they believe, and they look sincere about it, that they have done what the mandate mandates.

But I do not believe that, because I find that scientists who are not employed by DOE or DOD, and that includes all the scientists who have done all of that work at Sandia. Other scientists not employed by DOE, experts in their field of geology and hydrology, do not believe that WIPP is safe. Dr. Phillips gave you chapter and verse just tonight.

If I have an area of expertise, it is history. Again, not a narrow Ph.D. thesis type of historical expertise in a very ridiculously narrow field, but again a wide sweeping general planetary history given the safety record of DOE at Rocky Flats, Hanford, Oak Ridge, Los Alamos and other
It seems to me unwise, not to say insane, that DOE should be allowed to determine the safety of its own practices. And you, gentlemen and lady, you should not be pressured by purchased congresspersons to do anything other
than see to the safety of the citizens, all of the citizens
of our country and of the world, the environment -- that's
the name of your thing -- the environment is the whole world.

My other field of expertise is mythology. This
provides a kind of elderly wisdom easily dismissed by
experts, but in the long run usually verified by events.
The innate wisdom of humanity says it is unwise to
set problems aside without solution, to bury them or to lie
about them. Truth will out. Chemistry and geology and
hydrology and radioactivity cannot be successfully fooled.
Nature cannot be deceived or placated. It deals
truthfully and demands in the long run truthful dealings.

History and mythology teach that humans easily fall
victim to what the Greeks called hubris, defined as pride,
arrogance so great it verges on madness. That's the
definition of hubris.

Creating plutonium in order to make bombs to defend
our grossly unequal standard of living was the height of
hubris. Making more of it, which is what WIPP is really,
really all about, is additional hubris with some inkling of
understanding thrown in, because here we are throwing our understanding at you, and some prevarication thrown in also.

This is especially true, the fact that it's pure hubris, especially true now that there's no enemy in sight worthy of the incineration of the planet.
WIPP isn't safe. We know it, you know it. WIPP wasn't a good idea in the first place.

So I'm often asked when I begin to say things like this, well, what issued we do with it, this poisonous material with the half life of 25,000 -- not 10,000 -- 25,000 years. The staff at WIPP needs to be instructed as to the meaning of half life. They think the 10,000 years takes care of it. It will be 250,000 years before it's begun to take care of it. At this rate, that is of burying it there. I have an answer, believe it or not.

First off, quit making more of it. If we've not decided the fact yet, you ought to be able to tell the government of the United States this stuff is dangerous, we don't know what to do with it, so don't make anymore.

Until then -- but it leave what there is of it where it is. If that causes the shutdown of additional nuclear bomb factories, so be it. They need to be shut down. This includes Los Alamos National Laboratories and Sandia National Laboratories. Go to work you folks. Work which could be done in those laboratories once bomb making and
upgrading has been totally renounced. Go to work to discover

a new technology -- someone spoke of the new Manhattan

project -- one that will speed up the rate of radioactive

decay.

Here's my idea for you. A laser type beam perhaps.
Turn it on the stuff. Uranium turns to lead while you watch.

Plutonium becomes a problem with a manageable timeframe dozens of years maybe instead of dozens of thousands of years, but meanwhile WIPP should not open and our highways should not be strewn with this material.

If I had more time, I would describe in detail the way Leukemia kills little children. Believe me it is not pleasant to watch. I know because I have done it so I'm an expert.

(AUDIENCE: Stop the nuclear madness.)

PRESIDING OFFICER: Thank you very much.

Margaret Chu.

MARGARET CHU: Thank you for the opportunity for me to comment on EPA's proposeed certification of the WIPP.

My name is Margaret Chu. I work at Sandia Labs on the WIPP project here at Albuquerque. Today, however, I'm speaking for myself as a member of the general public, just like everybody else.

First I would like to voice my strong support of EPA's proposed decision to certify the WIPP repository. I
believe the process and the criteria EPA used to evaluate the adequacy of the application were extraordinarily thorough and meticulous.

EPA has spent months and months of time combing through records of data, analysis and computation. The EPA
dedicated a large number of full time staff and contractors
to its review during the last year. Under the requirements of EPA regulations, an independent peer review panel was also convened to judge the adequacy of the conceptual models used for the calculations.
In addition, EPA has requested a large amount of additional information during this evaluation period, and it has also conducted its own calculations to verify that the analysis in the application were indeed correct. Even though concerned stakeholder groups have been involved in the technical process throughout the whole project, sometimes these groups choose to continue to pursue issues that are not supported by science.
For example, experimental as well as extensive natural analog data have shown that the hydration of a magnesium oxide backfill will produce hydromagnesite and eventually magnesite instead of nesquehonite.
The EEG chose to ignore the scientific evidence and decided to use nesquehonite as the chemical mineral in their own calculations.
Another example will be the transportation accident risks emphasized by some individuals. In fact, the containers used to transport these wastes have been carefully designed and thoroughly tested. It has been demonstrated repeatedly there will be no leakage of radioactivity even
under the most severe accident scenario.

I can site many, many more examples like these. We as responsible citizens need to make decisions based on scientific facts and facts only. The EPA’s conclusion that WIPP can provide a safe disposal of transuranic waste is the result of 20 years of thorough investigation and studies conducted by reputable scientists and engineers.

The site and the facility have received more intense scrutiny than probably any other project in this country. I believe every scenario has been analyzed, every test has been conducted and every uncertainty has been addressed.

All of this work has been carefully reviewed and endorsed by international as well as U.S. review groups. I believe the safety and the soundness of the WIPP system have been fully demonstrated. The decision to open WIPP just doesn't seem hard to make.

I'm a mother of three children. I have exactly the same concerns as everybody else in the state of New Mexico. I believe we know what to do, we know how to do it and we can
afford to do to solve this national problem.

We need to move the certification process forward and start bringing waste to WIPP. Thank you.

PRESIDING OFFICER: Thank you for your testimony.

Next is Louise Pribble.
LOUISE PRIBBLE: My name is Louise Pribble and I'm a preschool teacher here in Albuquerque. I really hate public speaking so I'm very nervous, but I'm here because I couldn't be silent about this issue.

I'm here to voice my concerns over WIPP as well as the way that EPA has handled reviewing the safety of WIPP. I know others have talked on the same points I'll be speaking on tonight, but I believe these issues need to be pointed out over and over again until someone listens.

First of all, WIPP is the first project of its kind ever to be built in the world. There has never been a permanent underground nuclear waste site built or used, therefore, it seems every single exhaustive measure of caution and research should be used before anyone thinks of opening up such a permanent facility.

I do not believe this has been done by either the DOE or the EPA, and I do not believe that WIPP is safe or that EPA has done their job to look out for the safety of New Mexicans.

There are many reasons why I have concerns about
WIPP, but tonight I will focus on only two. First is the fact that most of the waste that are put to be put into WIPP have not been characterized, therefore, there's no way of knowing what sort of releases might occur. Without knowing the specific characteristics of the...
waste drums that will be placed into WIPP, the EPA cannot
know if the existing waste conforms to the waste streams that
are assumed in the Compliance Certification Application
submitted by the DOE.

Neither the DOE nor the EPA know the
characteristics of the waste that is to still be generated
which constitutes the majority of the waste that is proposed
to go into WIPP. With this lack of information, it is absurd
to say that safety of WIPP can be guaranteed.

The second concern I would like to voice is the
EPA's refusal to disclose the names and qualifications of the
contractors that provided their technical support to EPA's
research. How are we as citizens supposed to have faith in
EPA's reports and findings if those who research and write
them do not stand behind them with their names, but instead
remain anonymous. It seems only obvious that the
qualifications and names of those responsible for the safety
analysis of something as permanent as WIPP should be provided
to the public. The fact that they have not provided makes me
keep asking the question why these people are not standing
behind their work.

As I said earlier, these are just two of the many concerns I have about WIPP. A lot of my other concerns have been brought up much more eloquently this evening by my peers.
We are speaking out about WIPP because we care about the state and our families and friends who live in it.

Do not ignore our voices.

PRESIDING OFFICER: Thank you for coming and for your testimony tonight.

Ruth Weiner.

RUTH WEINER: My name is Ruth Weiner. I'm a resident of Albuquerque. For the record and because some comments have made, I have a Ph.D. in Chemistry from Johns Hopkins University. Before coming to New Mexico, I spent roughly 35 years teaching Chemistry, Environmental Sciences, and most recently at Western Washington University where I was Dean of the College of Environmental Sciences. So not all scientists who are not employed by the government oppose the WIPP, because I was for a long time not employed by the government and I do not oppose WIPP. I support the certification.

I'm currently employed at Sandia National Laboratory and worked on WIPP staff from January 1995 through September of 1996, and sporadically since then.
During 1993 and 1994, I was employed by the Environmental Evaluation Group of New Mexico. My statement here is strictly my own, does not reflect or represent the views of either of these organizations, and, in fact, has not been reviewed by Sandia.
Both EEG and the Attorney General of New Mexico worked hard to have EPA be the certification oversight agency for the WIPP, and the WIPP is not self-regulated by EPA. Now, I'm glad they did, because EPA has done a very thorough review of the certification application. I had occasion to study EPA's review of source in some detail and I want to tell you, they didn't miss a single item. I note with interest that in evaluating the affects of magnesium oxide on actinidine solubility, EPA pointed out that DOE has been, in fact, too conservative and had overestimated the solubility. But in response to something the previous speaker said, the WIPP was modeled as a slurry of all the waste mixed together and all in contact with any brine that could come into it.

My purpose here is not to dwell on details which are very well documented in the EPA technical review, but to state my agreement with the overall EPA findings for certification. EPA finds the probabilities of release from the WIPP as projected 10,000 into the future are well within compliance with the standards of 40 CFR part 191.
That's what DOE is required to demonstrate to EPA's satisfaction. The standard is a probabilistic one so the demonstration of compliance is also probabilistic.

Projecting 10,000 years into the future, that's the best you can do. We will never know how accurate the projections for...
modeling are, but they are based on a very well researched geologic formation and current knowledge of geochemistry and material science.

EPA has established to its satisfaction that even very conservative inputs to performance assessment do not result in violation. There are those who might argue with the standard itself, but that argument is not an appropriate subject for the present discussion and should have been taken up in 1985 when the standard was promulgated.

I'm not concerned with nit picking, so I can pick the wrong weight unit factor, but it's the basic idea of the standard. That should be allowed to stand today and shouldn't be brought up any further. Various groups, many of them at these hearings, have raised objections to the WIPP, however, no one has demonstrated that the assessments of WIPP's performance is flawed or that the WIPP cannot be projected to meet the EPA standards, and that compliance with the EPA's standard is the only significant criteria.

Arguments are made that we should leave the waste where it is, that WIPP is not a perfect answer, that science
will find a way to treat or dispose of it. While the
argument might have some validity if mine geologic disposal
had not been thoroughly studied and were not disposal methods
the choice for essentially every country in the world that
has this particular problem.
Leaving the waste where it is poses greater risk particularly when you consider human intrusion is much to back a truck over a drum of waste than to drill down half a mile into the ground. Moreover, there are no perfect answers. Civilization would have made no progress at all if people had not tried imperfect solutions to problems.

Argument are made that the WIPP doesn't handle all TRU waste or all radioactive waste or all DOE waste or all high level waste. The proponents of such arguments are the very people who are against using WIPP for high level waste and were in part responsible for the WIPP being a TRU rather than high level waste repository.

So what if the WIPP doesn't handle all TRU waste. Do we put all of the nations municipal waste in a single landfill, or all the hazardous waste in a single facility.

In closing, I would like to caution that proponents of any project can always rationalize doing nothing. They can always find a detail or two, particularly in a project of this magnitude and complexity that they don't like or would have done differently.
You at EPA have made an excellent and thorough analysis, and I encourage you to stick to your conclusions.

Thank you very much.

PRESIDING OFFICER: Thank you for your testimony.

Janet Greenwald.
JANET GREENWALD: I would like to begin my
testimony by thanking some scientists. I'd like to thank Dr.
Richard Phillips who has been working on the WIPP project for
approximately 19 years. I would like to thank Dr. Robert
Anderson, who has been working on the WIPP project since 1974
to 1976, and I would like to thank Dr. Lawrence Baros of
Sandia Lab, who was the first person who brought to our
attention that the WIPP was in a Karst zone. He no longer
works there. I would like to thank Dr. John Gibbons of
Sandia Labs, who first brought to our attention that there
were fractures in the Rustler. He no longer works there. I
would like to thank Dr. Davis Snow who was a consultant with
DOE for many years who found that DOE characterization of the
sites and their lack of investigation of possible Karst
channels caused his demise as a DOE employee who now works
for us. I would like to thank Dr. John Bredehoeft who was
once a consultant with the EPA who found that DOE analysis
was inadequate and now works for our state's Attorney
General.

I'd like to thank all of those scientists who took
the risks they did and basically lost their jobs because of it but thankfully, hopefully found other employment.

I'd like to speak briefly about other countries as Ruth just spoke about other countries. I'd like to speak about Sweden. Sweden decided to bring the problem of
radioactive waste to the populus of their country, something that's never been done here. They told their country what a terrible problem it was and how unsolvable it was. And this is what the people there decided. They decided to stop making it. They decided to put the waste in retrievable storage in granite caves, and they decided to work on neutralizing that waste just as projects at Sandia and Los Alamos are working on it right now.

My home, the home of my heart, is in northern New Mexico where my family owns land up there. We own six irrigated acres along the Embudo River. The Embudo River still runs clean and there's an old acequia system there. We live in the heart of the Hispanic north. We're very fortunate. It's clean and beautiful, but the people, ever since I have lived there for 30 years, have had to fight off all kinds of things to keep it that way. Copper mines, condominiums, you name it, people have fought it off. That's why it is so beautiful and I feel so privileged to be here in this state, and it's that beauty and that Hispanic culture which inspired me to begin this fight to try to stop this
radioactive waste dump here.

In this last year many of DOE's 20 PR people who work on WIPP have been up in the northern part of New Mexico. They've been passing out money and they've been talking to people and this is what they say. They say, you know that
radioactive waste that's leaking tritium into your water now

up here, well, guess what, if we could take it to WIPP, that

wouldn't be happening.

They've been engendering some support from pueblos

and other places. Well, our friend Deborah Reed, who lives

in Santa Fe, was told this by a DOE PR person, and she's just

one of those kind of ornery, pesky CARD people who never

believes anything anyone tells her unless she hears it from

the horse's mouth.

So she went up to Los Alamos, and during a lunch

break when the guard wasn't at the door of a certain gated

facility, she went in there, and it was one of the facilities

where waste is stored up there, and she sat down and talked

to the official person who takes care of that waste

repository, waste dump, waste storage area, I'm not going to

name it, and this is what he told her. He said no, we don't

have the money to take care of that waste that's leaking

tritium into the aquifer now and will soon be leaking

plutonium into the aquifer. We don't have the money to take

care of that because right now all the money we have for
nuclear waste disposal is being spent on getting drums ready to go to WIPP.

This is a heavy line that's circulating around in northern New Mexico, and as I say, it's being accompanied by little bits of money here and there. You know, people wonder
Richard, on a shoe string can find the waterflow paths of WIPP and DOE has never been able to.

I can tell you DOE hasn't put their money there. That's not where they've been putting their money. They put it lots of other places though. Lots of other places.

Last Earth Day I had a table at La Maquinita Co-op earth day, and a man came to me and he turned out to be another Sandia scientist whom I can't name because he still wants his job there. But he said you know there's a report that you should get hold of, and he gave me the numbers. And someone better at looking reports better than I am looked it up and I looked it over and I gave it to Deborah Reed. And she called me one night and she said, well, this is a pretty obscure Sandia report. I've never seen anything like it before. She said, do you know what it says, and I said no. She said, well it is about what's going to happen if there's a nuclear accident here.

This man was asked to do a cost analysis of what will the cost be if there is a bad nuclear accident here.

But instead of doing that the man said simply, you can't
clean it up. You can't clean up plutonium dust.

This is our home here. It's been the home of Hispanic people here for hundreds and hundreds of years. Our roots are here. If there's a nuclear accident here, I know now that it won't be our home anymore.
This isn't something that people talk about. It was an obscure Sandia report. I guess I'm going to end this by saying that people here are going to fight this. You don't see very many people at this hearing but if the trucks start rolling, you'll see them on the streets. They've already put a lot of money into a fund for a lawsuit because they think that's where this is going, because this is our land ditch stand for our home. How can you expect us to trust DOE with transporting nuclear waste through our state?

We had a conference here, a mini conference two years ago where radiation survivors from Rocky Flats, Nevada test site, every nuclear facility you can think of came here. Those people were very sick and some of them said I'm the wellest person in my group. That's what the woman said who came here from Rocky Flats. She was the wellest person in her group that was employed at Rocky Flats. She was trying to get compensation. She had seizures, constant seizures. We'll fight this any way we can and I just plead with you, take a brave stand. I know it is hard. I know you
won't keep your job and I know it is a lot to ask. That's all I can do.

PRESIDING OFFICER: Thank you very much for your testimony tonight.

Jay Evans is next.
JAY EVANS: Presiding Officer Wilson, Acting

Directors, counselor, thank you for taking this testimony. I hope my hometown treats you well and in return I wish that the EPA would treat my home state equally well and not turn it into the nation's nuclear sacrifice area and withdraw the Draft Operating Plan For Compliance Criteria.

For the record, I call your attention to the fact that the DOE has never had a site that did not leak at an astoundingly shorter time than they thought possible. It happened right here in Los Alamos, at Hanford, Savannah River, Oak Ridge, the list goes on and on.

All the intense scrutiny that the Sandia Lab LACI's claim to have taken place do not change a few basic facts, and I say here, hey, Labs give me a break. They don't even know the nature and scope of the waste right up there on the mesa at Kirkland Air Force base that contaminated donkeys that they continue to dig out of the ground, so they don't have a lot of credibility with me.

A key point in Dr. Phillips' testimony that I would to reemphasize for the record is that all five strata at the
WIPP site show waterflow and there's nothing to prevent rainwater recharge, so taking that, water is going to get in. I'm not even talking about the high probability of oil and gas exploration, and I restate the fact that there are 120 working wells within two miles of the WIPP site right now.
No one disagrees -- and this is a critical point
from my understanding of the issue -- no one disagrees that
there's no container that will last as long as plutonium is
the most toxic substance on earth.

Acting Director Weinstock and Acting Director
Marcinowski, I think you probably know about the Inhalation
and Toxicology Resource Institute out here on the west mesa,
where they collected data about the toxicity of plutonium,
which we're going to have 13 tons at the WIPP site
depository. And they collected that data by injecting little
Beagle puppies with small amounts of plutonium to find out
how small an amount would guarantee lung cancer and the
horrible death that accompanies that disease.

I don't know if you're aware of that, but that
happened right here in my own town. And the discharge ponds
out there are another waste problem that we haven't been able
to come to terms with. You can almost hear those little
snoopies barking, barking, barking, dead.

It is my understanding the EPA refuses to disclose
names and qualifications of contractors and consultants that
provided technical support. This flies in the face of my
understanding of the scientific method. My understanding is
if you research, you publish, get peer review. I don't think
it's unreasonable if the EPA stands by its work in this life
and death situation to let us know who is responsible. That
is not really a big stretch.

In closing, I would like to encourage you in the strongest terms I can, without being carried away by the state police, to withdraw the Compliance Certification Application, and further, and on a positive note, I would like to call, like I did with Secretary Pena when I met him this past summer in Philadelphia, for a monitored double walled retrievable surface storage facility at the point of waste origin until we can formulate an adequate solution. Whether it's vitrification, transmutation, transmografication or some other unyet discovered method of detoxification. I've got to have faith in human beings and even the big brains at Sandia Labs that human beings are capable of discovering an adequate solution. And I further believe that if we don't do that, our grandchildren and their grandchildren are going to curse your names.

PRESIDING OFFICER: Thank you for your testimony today.

I'm now going to check those people who weren't here earlier and then go to the waiting list.
Jeanne Carlston.

(No response.)

PRESIDING OFFICER: Louise Bower.

(No response.)

PRESIDING OFFICER: Paul Rueckhus, Maria Baca, Judy

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(No response.)

PRESIDING OFFICER: Okay, Lyndia Spurling, is she here?

(No response.)

PRESIDING OFFICER: Amy Nixon, is she here?

(No response.)

PRESIDING OFFICER: Jenny Van Winkle.

JENNY VAN WINKLE: I'm standing up here and it's incredibly difficult for me to talk in front of any group of people, but I'm forcing myself to do it anyway because I think it is so important, it needs to be said over and over again that to track nuclear waste all over this country and to bury it in a site that if you look at it honestly it all -- you can't say it is acceptable for storing nuclear waste.

Then because you have a place to put it, to say it is okay to create more and more deadly toxic nuclear waste, to do that is to deny your own humanity and to go against the wishes of the majority of the people and to wage a war on all
the inhabitants of this beautiful, amazing planet. And it's
just -- to do it in the name of disgusting, dirty, ugly
money, and I just want to say I think it is wrong.

PRESIDING OFFICER: Thank you.
Penny Maynes.
PENNY MAYNES: I've lived in New Mexico for 15 years and I'm opposed to the WIPP site for the reasons stated today by Dr. Phillips, Janet Greenwald and others.

I'd also like to note I'm a little curious about the fact that EPA refuses to disclose the names and qualifications of contractors who provide technical support.

And that the DOE refuses to name the authors of the rebuttal to the argument of Dr. Snow and Dr. Richard Phillips, and also refuses to name the author of the environmental impact statement.

I wonder, are those people hiding from the Internal Revenue Service, or could they be behind in child support payments.

Or perhaps the authors of the DOE Environmental Impact Statement and the rebuttal to Dr. Snow and Dr. Richard Phillips are well known fiction writers whose names we'd recognize if we heard them and their talent at writing fiction are now being put to defending the WIPP site.

My insinuations may seem absurd to you, but they are no more absurd than refusal of the EPA and DOE to
21 disclose their contractors, authors and their qualifications.

22 I'd also like to note that the handling of

23 radioactive materials in the United States often by the DOE

24 has been determined by power and greed not by science or

25 respect for the common good.
I also wonder if these hearings do any good or if it is all just going to be one powerful group that determines the outcome.

If the handling of radioactive materials had been determined by science and regard for the common good, we would not have had a situation in Hanford, Washington, we would not have radioactive material in the Columbia River, we would not have the sickening level of radioactivity in Rocky Flats plant, we would not have a high incidence of brain tumors in Los Alamos County.

There's another kind of power and that's the power we all have to act with integrity and character. In New Mexico schools we call this character and say character counts. It's doing what's right despite regards to your paycheck, job or reputation.

I'd like each of you to use your personal power and integrity to ensure the EPA begins to act as an independent agent not as an unofficial arm of the DOE.

I believe the EPA is not acting as an independent agent now, because it accepts as fact statements made by the
DOE. When there are two sides to a disagreement, one does
not blindly accept a statement by one side as part of the
rationale for a decision.

A few of the statements accepted by the EPA are
that the Mescalero Caliche covers the WIPP site and prevents
rainwater infiltration; that the Dewey Lake Red Beds have not
produced water in the WIPP shaft or in test wells above the
waste panels; and that there is no evidence of dissolution in
the Rustler or Salado formation within the WIPP site.

In addition, the EPA has said that if a site lies
in an area where valuable resources are present or where
there has been or will be mining for resources or where
there's a large amount or rare resources, the site must be
shown to have favorable characteristics that outweighed the
risks associated with those resources.

We are all aware of the oil, natural gas wells and
potash mines in the WIPP area.

DOE has not shown the site to have those
potentially favorable characteristics mentioned just earlier.

Instead, the site has been shown to have many problems as
noted today.

It is possible that each of you could use your
personal power, your integrity to see that EPA acts as an
independent agency.

We've obviously had enough handling or radioactive
21 waste based on thoughtless power and greed. Just one of you
22 could turn this thing around and base a decision on science
23 and the common good. Perhaps waiting for new technology as
24 Dave Mitchell suggests.
25 I believe you can and that you have it within you
to do better than has been done in the past. Whether or not
you choose to is up to you. Thank you.

PRESIDING OFFICER: Thank you.

Next is Sally Alice Thompson.

SALLY ALICE THOMPSON: My name is Sally Alice
Thompson. I've lived in Albuquerque for 45 years. Before
that I was a citizen of other parts of the United States.

I'm a very patriotic citizen. I believe that as long as we
have a real democracy in this country, we're going to have

things working well. But when a few people start running

things because they have a power of a lot of money behind

them, we are on the road to a very lot of trouble.

At the present time, there's a great erosion in

confidence in our government, particularly of the DOE because

of the many, many lies that the DOE has propagated on the

public.

I mean it is very obvious that the lies that they
told us about Rocky Flats and about downwinders and about

Hanford, all of those things have really eroded our

confidence in our government. We feel very badly about that.
Another thing that I'd like to mention about the DOE is their flagrant disregard for the welfare of the people except for themselves, of course. They live in areas where they don't -- where they are not in any danger from the results of the things that they propagate, but they are not
concerned about the welfare of other people.

I'm going to tell you a story. It's not a fairy tale, it is a true story. It's a story that you would have known if we had a really, really free press, but since we don't I'm sure you haven't heard this story, because the right hand even in government doesn't know what the left hand is doing. Have you heard this story of Jim Bailey?

(No response.)

No? He was a truck driver for Oak Ridge. And the workers of Oak Ridge wear protective clothing but the truck drivers are not allowed to wear protective clothing because they don't want people to know when the trucks carrying nuclear stuff are driving around, so they have to wear this ordinary clothing. So they were not permitted to wear protective clothing.

He had his first child, a daughter. She had three -- not one, not two -- three brain tumors. She lived very uncomfortably, very painfully for four months. In the four months her head grew to the size of an adults and then she died.
Well, he was, of course, very upset about it and he started going to medical people and essentially the cancer specialists, and they found that he had chromosome disorganization as a result of the radiation that he had experienced when he would go to check on the -- he had to go.
into the trucks to check on the cargo.

So, he refused to drive anymore. And DOE played along with him and placated him for a few months. Then they said, well, now you've got to start driving again. And he said, no, I won't do. I'm not going to take a chance on having another child with cancer. He refused flatly to drive and they fired him. So he took it to the GAP, Government Accountability Project, and they supported him in a law case. And the judge decided that in view of the fact that he was wearing a monitor that always registered zero -- and they tried the monitor right where it was known there was radiation and it still registered zero -- they told him -- well, they told the judge it has to be placed in a certain way or it won't register.

Well, how can you wear a monitor that has to be placed in a certain way -- and it turned out that the other carriers, the other couriers for Oak Ridge had the same kind of monitors and they didn't work either.

So the judge said that Oak Ridge had to rehire him and gave him his job back. Well, instead of doing that they
have appealed and they won't give him his job back because

they are appealing.

And I'll have to read to you from the report from

the Government Accountability Project, the follow-up of that,

the DOE management responded to the findings not by
correcting the problems but by retaliating against couriers
who were taking part in the investigation. The retaliation
was sweeping and systematic. Three managers formed a blue
ribbon panel which met with every courier on the Oak Ridge
division. All courier assignments out of Oak Ridge were
suspended until the panel had interviewed everyone. Couriers
were told to answer three questions and informed that their
answers would be reviewed and their futures in the program
would be adjusted accordingly.

Not surprisingly the investigation had a chilling
affect among the couriers at Oak Ridge. One courier
described the experience to GAP and their figures, I answered
don't know to all three questions on the survey and would
soon regret it during my hearing before the supervisors. I
spent approximately 35 degrading minutes before these
individuals who told me that my answering "don't know" will
result in my security clearance being rescinded.

I was provided with a new questionnaire. Now, can
you imagine that? They didn't like what he answered so they
gave him a new questionnaire. They said you answer these
right or you're going to lose your security clearance. So he
answered right and kept his security clearance, but he wasn't
happy about it and he called it coercion.

Now, this reminded me of something that I notice
today --
PRESIDING OFFICER: Ms. Thompson, your time is up.

If you could summarize.

SALLY ALICE THOMPSON: Okay, I will summarize what I want to say.

I notice that every person who argued in favor of opening WIPP has an economic interest in it. Every person who does not, has testified against WIPP, does not have an economic interest.

I'm wondering to what extent these people are concerned about keeping their security clearance or whatever. I just -- one thing that really concerns me is that all of this testimony, if it is ignored, it puts the government again in the situation where people with fragile egos like Timothy McVeigh and Terry Nichols, they resort to anarchy because they feel so disempowered that they will do anything.

This is not what we want in our country. We want our country to have a real democracy, and please listen to the people -- the people, not the people who are paid to keep on doing this nuclear business. Thank you.
PRESIDING OFFICER: Thank you for being here.

Next is Larry Brush. Is he here?

(No response.)

PRESIDING OFFICER: I guess not.

Robert Anderson.
ROBERT ANDERSON: Thank you for being here. I was on the schedule earlier but I somehow got mixed up, so I'm glad you're still here. I want to thank you folks for being here, especially the people who are speaking in opposition to this. Of course I'm going to speak to not agree with the compliance.

I had a speech and a lot of thoughts, but everyone else said a lot of good things, so I don't want to repeat a lot of that. I'm going to try to summarize some of it and make some general statements too that I think are important to this.

A lot of the DOE people give a lot of credentials on who they are, so I don't like to do that, but just to let you know a little bit where I'm coming from on this and some expertise, maybe. I have a Masters Degree in Public Policy and basically Political Science from Carnegie Mellon University, a wonderful Ivy League school where you spend a lot of money for it and hopefully I learned something there.

I think I did, because I can bring it to this kind of problem, and I see this is politics and not science, for
But I also have some other expertise. When I was in the air force, I was in nuclear weapons program demolition work, and I probably actually handled some of these things more than some people in the room and some of the components.
of it. That also qualified me to be, what they call an
Atomic veteran.

I didn't realize until a couple of years ago when
Hayes O'Leary (sic) declassified a lot of the documentation,
that actually I was working around the Nevada test site on
the Mercury range there when there were some leaders and
tests were going on and they never told us about that.

So I feel a lot of qualifications to speak on this.

I also -- I think one of the things I want to press on this,
I think a scientist can approach this pretty objectively, but
I don't have an economic interest in promoting this or
anything other than looking at it objectively.

The message I want to say is that I think this
whole project -- there's a lot of documentation and people
raise things here, I mean waterflow, Karst, oil wells being
drilled there that weren't expected. A lot of things that
shoot a lot of holes in this whole thing, unnamed authors. I
mean this whole thing sounds to me more like some of the
studies like these resignation letters that are electron dated
that you get when you get out of cabinet post or a high
21 political position, where the feel has something like that.

22 I've been watching this series on PBS the last few

23 days about Cecil Rowe and the establishment of the Apartheid

24 government in South Africa, and that's the kind of thing he

25 used, and this whole thing sort of has like more political
flavor of that than it has any logical rational reality to
is, because I think the original step, the first step off on
this thing to bury this waste, I mean, this is basically a
dump, I mean, a high level and low level radioactive waste
dump in our state here.

It was flawed from the beginning from everything
down that road. You can find all kinds of mass nations and
political stories and someday this things going to be really
studied in political science classes for how the decisions
were made and not made and what influenced those things of
things.

That's where I come in bringing that kind of
specialty to it is that I see that, you know, here we are at
another one of these final last hearings before WIPP is going
to open again and it seems like these things always sort of
coincide with some kind of upcoming congressional election
system. Everyone is trying to get this thing open before the
next run of elections comes up in Congress, and maybe they'll
be totally opposed to it, so here we are again, and I think
we've stopped this thing a whole lot of times. I'm really
21 proud of that.
22 I was thinking about the headlines in the
23 newspapers, what are they going to say tomorrow as they
24 prepare this to Carlsbad. Are they going to say here in the
25 heart of the DOE, the brain trust that is in charge of
running WIPP, that I counted over 100 people came out here in
this town and spoke out against this certification and
compliance for various reasons.

I think it probably won't even make the newspapers
at all. I mean I don't think they'll be any coverage or
they'll even talk about it. But I feel really proud of all
of the people that came here, because we are in a big city
far away from where half a million dollars a day is being
dumped into this hole in the ground to keep it open.

People are speaking very objectively and honestly
and from their heart, and I think you, the EPA have really
got to take a look at that. What's significant about this
too is that the further you get away from the WIPP site and
the dump areas, people become more objective and think very
seriously about this.

As I was reading the paper Saturday up in Colorado,
all the politicians and governor and mayors and officials got
together and they are trying to push WIPP open because they
want this stuff out of there, out of Rocky Flats. They know
how bad this is. This is happening all over the big cities.
21 They want to dump it somewhere in little places like this,
22 little colonies. Weak little colonies of the country that
23 won't be able to resist this. So people do think very
24 seriously about this and very clearly.
25 I just want to finish up with one little thing
that Dr. Weiner made the statement and the lady from the DOE certified this thing for 10,000 years down the road. I think this is bad science. Dr. Weiner said no one had disproved the theory that this could be guaranteed for 10,000 years.

And I just want to say the thing about proof is they have not proved it can either. You can use probability or whatever. This is a political decision and not a scientific decision. We've got bad politics making bad science. It never works. I think it is a bad situation because they can say the proof, it cannot be proven for 10,000 years, which I think is the most ludicrous statement anybody can come up with. All you've got to do is think of Rocky Flats, Hanford, Savannah River, Oak Ridge, Los Alamos, even Sandia here, the plutoniums in the soil here in the city.

So the proof is there, and if you draw a scientific conclusion from this of what's there, you cannot certify on any kind of rational basis of 10,000 years this thing is going to be safe. Thank you.

PRESIDING OFFICER: Thank you.

Mary Steep.
(No response.)

PRESIDING OFFICER: Michael Mauzy.

MICHAEL MAUZY: Good evening. I'm Mike Mauzy. I live in Albuquerque.

So that you know something about me, I'm a
registered professional engineer in multiple states and I
retired about a year ago. Prior to my retirement I worked
for 15 years with Roy F. Weston as a corporate officer.
During this career I worked for 12 years as a consultant with
DOE as a major client. I have worked at every major site
involved in the DOE weapons program.

Within the last two years prior to retirement, I
managed work on a technical support contract to the Carlsbad
Area Office. Hence I'm knowledgeable in some of the
activities and programs carried out to compile and justify
the data analysis and information contained in the Compliance
Certification Application.

Prior to my career with Weston, I spent nine years
in the Illinois Environmental Protection Agency, seven of
which was in the capacity of assistant director or director.
I want to commend EPA for its thorough review of
the DOE Compliance Certification Application for WIPP. You
did a fine job. The proposed rule, the supplementary review
and introduction to the proposed rules succinctly translate
complex science and technical information into plain readable
English. It's clear you did your homework, that you read the massive application and its appendices, and that you independently analyzed some of the information.

The Land Withdrawal Act of 1992 and amendments of 1996 established requirements to be satisfied by the
Department of Energy prior to opening WIPP. By in large, the
requirements contained in this legislation represent, in my
view, sound public policy and improvements in the process to
build public confidence in the program.

EPA’s involvement in the process has been beneficial. EPA’s behavior through the compliance, through
the application review has been a model for regulatory
agencies.

The review which you conducted has been completed
on time and your proposed rule now represents the culmination
of some 15 years of efforts with considerable public expense
to open the deep geologic repository for the disposal of
transuranic waste.

Now that your review is complete and the proposed
rule is published, it is time to open and operate WIPP as is
consistent with the Land Withdrawal Act and its amendments.

EPA’s involvement in this process has been
unprecedented, and so far in my view, very constructive. The
compliance certification agreement demonstrates time and
again built-in safety exists in the project. Even when
compared with most worse case scenarios, there has been
extensive third party independent peer review of DOE’s data
and analysis contained in the Compliance Certification
Agreement. The independent review and analysis was performed
by national and international experts prior to submission of
the application. The process was not a peer review rubber
stamp, but a sincere effort to obtain services of
knowledgeable, technical people who can review the material
and prepare an independent assessment of it.

I'm concerned about the impact on the program of
condition two of the proposed rule. I do not see convincing
evidence of the need for EPA to inject itself in the middle
of the generator site certification process.

Condition two places EPA on a critical path at
every generator site. The program will with the process
defined by condition two will slow down the certification
process and lengthen the time required to achieve relocation
of transuranic waste to the repository where safety is
enhanced.

If this concept were extended to other
environmental purposes such as air pollution control permits
or water pollution control permits, chaos would reign on a
national basis. There's a legitimate role for EPA, however,
in providing oversight, surveillance and audits to DOE
programs to assure that waste transferred from the generator
sites to WIPP are properly characterized prior to shipment
and that the characteristic indicate compliance with the WIPP
waste acceptance criteria. This is the traditional role of
the regulatory agency. This is the model that I believe
should be followed.
In summary, it is my belief that WIPP protects human health and the environment. WIPP should be granted approval to open and operate without further delay.

EPA should not inject itself into the sight generator certification process. EPA has the responsibility to insure that the site generator certification process is working and that the WIPP waste acceptance requirements are in no way compromised. Open WIPP without further delay as Congress has mandated. Thank you.

PRESIDING OFFICER: Thank you.

Next is Julie Ahern.

JUDY AHERN: This is pretty impromptu and I'm pretty tired and getting whatever that virus is going around.

So I won't stand too close to this microphone, and I hope that I'm somewhat coherent.

I was reading through some of the literature you have out here and the one that says State of New Mexico WIPP transport safety. I have three words to say about that. Fix the roads.

There was a study that was reported on the radio
last night that 79 percent of the roads in New Mexico are
substandard by national standards. That we are on the bottom
along with other things like infant mortality statistics and
other sorts of things. We are on the bottom in the nation
for the quality of our roads. So if we're going to put those
trucks on the roads, we need a massive overhaul of New Mexico roads.

Not to mention that while our drunk driving records have improved, they are still not very good from a national perspective. And I don't know if you are aware of the very tragic accident that just happened in Socorro with several graduating 18 year olds. That follows up on another accident where six teenagers were killed on a highway. Rural highways can engender fast driving. New Mexico is kind of famous for it's fast driving.

This is not a safe state to put touchy materials on highways. We are not a state that has the money to fix the roads.

And the other thing I noticed here on the alert annual local emergency response training, all of this stuff this program can provide in terms of training people along the way, there's no mention of what I would assume would be very expensive hospital equipment to deal with people who were contaminated in an accident if there ever was.

I mean we don't even have very many hospitals along
these highways. You go for long stretches in New Mexico
without there being any towns. Like between Vaughn and
Roswell is about 90 miles.

So presuming you transport injured people from the
site of one of these accidents, is every rural hospital along
the way going to have the equipment to deal with radioactive
activity? We are a poor state. There is not at present the
infrastructure to handle one of these accidents, and the
least that the State of New Mexico and the federal government
can do for the citizens of New Mexico is fix the roads and
get the right equipment in the hospitals, and make sure,
because my understanding is that at present many personnel
have not been through these sort of training things to handle
this.

So I don't think we're -- just in terms of the
infrastructure of the state, we're not ready to open WIPP,
let alone the argument about whether or not WIPP is safe.

Our state is not safe for it, for the transport.

The reason why I actually -- this was what I
thought about while I was sitting here. The reason why I
signed up to speak was because my husband is part time
professional in the staff of one the larger churches in town,
and it is a upper middle class, comfortable church, and so
many of the -- I don't know if you're aware of the economic
structures in this state, but there are a few sorts of jobs
that pay a lot of money, and then there are many, many jobs
that pay very little money.

A bulk of the few portion of jobs that pay a lot
of money in the state are defense related. So many people
that I know, that invite to dinner, that I deal with all of
the time in prayer groups, whatever, are linked to the
department of defense.

Needless to say we don't have these conversations a
lot because I wouldn't be here about my concerns about WIPP
if I didn't have very different political views. But it just
struck me as I'm thinking about it over the past few days. I
mean, everyone I know who is involved in this is very
materially comfortable.

My husband works one full-time job and two
part-time jobs, and I work a part-time job, and we don't make
half the income that a family where one partner works full
time at Sandia.

And I am not saying that they are bad scientists,
haven't done their Ph.D.'s well or that they are not decent
human beings, because I know they are decent human, because I
pray with them and they are my friends and they are valued
members of my community. But there just is the realities of
the economic difference.

Now most of the people that I know that work at
Sandia, and several of them work specifically on the WIPP
project, they started maybe 10, 12 years ago. Well, how do
you get a job there if you don’t already believe that it's
going to work. How can you question, in that environment,
like Janet Greenwald said, she lives off all of these
scientists that don’t work there anymore because they decided
that it didn't work out right.

So the science has to be biased or otherwise people wouldn't, you wouldn't have a job there. If you look around New Mexico, there aren't a lot of jobs to have. The ones for -- this is probably my closest friend, she and her husband were out of work for six months before they got a job at Sandia. Well, if he decides whatever his personal integrity and scientific finesse aside, if he decides not to work there, if he decides to take the position that WIPP shouldn't be opened, where's he going to get a job? I mean defense jobs are closing down all over this country, and he is used to a certain standard of living, so there is just an overarching problem with the science.

And I would just like to point out quickly that we have this problem in tobacco industry. We have an industry that says there's no proof that tobacco causes cancer. And the scientists who are employed by the tobacco industry say, I mean, this is just -- science is not as sophisticated as we want to put it. There's all kinds of social, political things that go into science. And all kinds of just personal
motivations. You've got to raise your kids, pay your house payments.

When Ms. Chu said that she's got three kids and she has the same concerns as everybody else, well the city of Albuquerque did a study in the early 1990's about housing in
Albuquerque, and they found that half the people that reside
in the city cannot afford their housing. Well, that is one
problem that unless Ms. Chu has purchased some 6,000 square
foot custom home, she does not have a problem with that if
she hasn't overbought on her salary from Sandia.

People who are employed with defense industry in
this state do not share a lot of the same problems as other
people in this state, and a large chunk of them this is a
poor state.

PRESIDING OFFICER: Ms. Ahern, your time is up, so
if you could conclude.

JULIE AHERN: Well, I've been here and I'm sick and
I just want to get through -- I'll try a couple more minutes.
The other thing is that I just watched a program on
the weather, and all of this about all of our developments
and understanding these complex models, how weather works
within our biosphere, and we still cannot predict the weather
farther than a week ahead. That says something about how far
we still need to go, which brings me to the next -- I'm
streamlining -- somebody else brought up hubris.
My husband and I sort of disagree on the kind of movies we go to, but my parents were in town and he wanted to see Titanic. It wouldn't have been my first choice but I went. But you know something, that is a devastating movie and I really recommend that you see it.
And I think there's a little bit of irony and maybe
a sad irony, but you go and see that movie and there aren't
enough -- we've all heard about how there weren't enough
lifeboats and 1500 people died and only 700 lived, but if you
can go and see the movie and the whole impact of the movie is
these lies. These were people. Fifteen hundred people died
on it, and the reason they died was because there was
absolutely no question that this ship couldn't sink.

Human beings are prone to hubris. The Greeks
understood that and we model our whole civilization on the
Greeks. There's a lot of hubris going on here and I'm not
even saying that I know for sure that WIPP isn't and doesn't
have some good science behind it. But to say that we know
10,000 years into the future based on any scientific model,
we can't predict the weather beyond a week. We're not that
big, we're not God. That's the whole point of Adam and Eve,
okay.

Let's not go down to the bottom of the north
Atlantic, because I'm really afraid that there is bound to be
elements of that.
The last thing I'd like to say is I have a clear inspiration that I think is going to solve all of this. Are you ready to hear it? There's this water that's in the flow channels above the WIPP repository. Okay, Socorro didn't want to sell water rights to Intel. So what we do is we sell
the water rights to all that water in there to Intel and

Intel gets the water, the water doesn't go down to WIPP and

we're all happy. How's that?

PRESIDING OFFICER: Thank you for hanging around
even though you didn't feel well and for your testimony.

Next is Chuck Hawking? Is he here?

(No response.)

PRESIDING OFFICER: I guess not.

Rich Weiner.

RICHARD WEINER: Good evening, my name is Rich Weiner. I've lived in Albuquerque for six-and-a-half years

and I hope to live the rest of my life in this beautiful

state if the State remains inhabitable by some mobile

Chernobyl type disaster to WIPP introduction coming through

I-25 and I-40 or to a series of low level or so called low

level leaks that render the area extremely unhealthy.

Like many other people here, I came here to help to

protect the state to protect human health and I'm not under

contract by the federal government, I'm not working at one of

the national laboratories. I think that most people here are
taking the decision and taking it because they love the
state and they want to stay here and protect the quality of
life here.

Back in the 70's I was living in Washington D. C.

I was there not too long after EPA was created. I believed
then, I was joyous then, less than joyous now., I still believe that the mission of the EPA is to protect the environment and to protect human health and other living things. It's not to protect the sloppiness of the DOE, the incompleteness of its application. It's not to aid and abet the DOE in cramming this WIPP project down the throats of New Mexico citizens.

The WIPP project is a serious environmental threat and it's the duty of your agency to protect us New Mexicans from that threat. I would like to applaud Dr. Richard Phillips and other scientists for doing the work that the DOE has never done and does not intend to do.

Will they ignore the evidence that was so articulately presented and demonstrated by Dr. Phillips. It does so at the risk of whatever confidence that the people have in it to protect the environment, and more importantly, it does it at the risk of being responsible for tremendous destruction of a large chunk of the environment in New Mexico and it's human stewards.

It is crucial that EPA apply the strictest and most
21 rigorous standard of review in evaluating DOE’s application.

22 It is not too late for the EPA to do it even though it so far

23 seems not to be in the preliminary approval of the DOE

24 application.

25 We are talking about models, computer models and
the assumptions that they go into it. Everyone knows they are not perfect. Furthermore, when you know there are erroneous assumptions built in and we cannot afford to accept the models and the assumptions that go into it given the incredibly serious consequences of the likely errors that were, in fact, the many known and unknown errors that are found in that model and in the assumptions to that model.

As far as transportation of WIPP products, WIPP waste is concerned, well many people have already spoken to the danger of traveling on highways in New Mexico. We just recently, in fact, heard about a uranium truck, a truck with uranium products spilling in Colorado. I'll tell you, I commute to Santa Fe so I have to get up pretty early tomorrow but I made the sacrifice to stay up late tonight. But I'll tell you I've seen many horrific accidents on I-25 between Albuquerque and Santa Fe, especially when it starts getting icy, which it does quite often in the winter.

One thing I'd like to let you know about is that in yesterday's Albuquerque Tribune their was an article on page
3, first section about the WIPP hearings. Right next to that article ironically is a small brief blurb that I would like to read part of, and the headline is, "Fuel Spill Jams Freeway, Causes I-25 To Be Closed." As I read it, I'd like you to try to imagine powdered plutonium being spilled.
instead of whatever fuel was spilled on the freeway.

It says, an accident involving a semi tractor trailer rig forced the shutdown of southbound I-25 for more than two hours this morning. Traffic was still lined up for miles at noon because of the closure on I-25. The accident occurred when the truck flipped over on it's side spilling fuel onto the freeway. All southbound lanes were closed after the accident. The dispatcher said the cleanup was taking a long time because the fuel spill had to be covered in sand.

Now, there were serious injuries. There were no injuries as a result of the accident, but if we were talking about powder plutonium spilling on that and even if there wasn't a wind that was carrying that into the neighborhoods surrounding the freeway, try to imagine the horror of all of these people lined up in their cars, no way to be evacuated from that situation and having to breath particles of plutonium. Now I know that many people are arguing that in fact the WIPP trucks are safe, but just like anything else, we cannot be sure of it.
I'm not convinced by any of the evidence I've seen. There's plenty of evidence to show that we cannot be sure that such an accident will not take place with hundreds and hundreds of these trucks rolling through I-25 and I-40 over how many, you know, every year for how many years this is
going to go on.

You at EPA have the power to prevent these kinds of scenarios from happening, and for the sake of New Mexicans, I implore you to use that power to make sure that it does not happen, that WIPP does not open until a true consensus develops that is safe if it ever develops. Thank you.

PRESIDING OFFICER: Thank you.

Mary Ann Fisk.

(No response.)

PRESIDING OFFICER: Leslie Ann Weinstock.

LESLIE ANN WEINSTOCK: I'd like to give my time to Bay Woods.

BAY WOODS: My name is Bay Woods, and I seated my time earlier to Dr. Phillips. She asked me if I would like to take her time and I very much would like to speak to you tonight. Thank you for staying so late. I'm sure that your as tired as the rest of us are.

You maybe somewhat surprised to find out that among the people in this room who are opposing the WIPP site, you do have some friends.
This summer during August some people in this room went to the Bernalillo County Detention, went to jail defending your agency because we had received a letter that Senator Domenici, along with several other congressmen had sent to Secretary Pena of your organization threatening the
funding of the organization for following up on your duties to protect the citizens of this country and this state.

And they said that -- I'm sure you may have seen the letter -- they said that if you had so much extra funding as to do things which they felt the Department of Energy had already done sufficiently, that you didn't need the money that you had. I don't know if that threatened any of your jobs or not, but some people were very concerned about that because we feel that you are our only protection in this case, or at least our first line protection.

Janet Greenwald mentioned earlier that if this does go through the people will have to find another means of protection. People will have to go out and into the streets and do something else. And as I've been sitting there tonight, I looked at ya'll the whole time and you haven't seemed to listen that much, so I'm going to turn around now and speak to the people out here because they have been listening. I've clapped more tonight than I have in a long time. I've heard people say really sensible things and I thank everybody for the things that you have said, but you
21 know the chances are these people are going to put this
22 through or they very well may. Just as we look into the long
23 run of if things don't go necessarily as we planned, we're
24 looking at the WIPP site.
25 You know it probably won't go as the DOE plans,
things won't turn out on the best case scenario, and our
best case scenario is that these people behind me are our
friends. And that they actually care about us as human
beings, and they care about the other biota of this region,
not just human beings, but other species, other life here.
I can't make that assumption that they do care and
I don't think any of us can. I think we all need to begin to
organize, because the only way we can stop this is through
numbers and through really coming out to show that whatever
ty they say that we have to protect ourselves to some degree.
People did go and we really are counting on you to
protect us, but that can't be our only means, because if you
fail us then it's going to go through. And if people die,
that will be on our heads as much it's on your head.
That's something that as an individual I can't
support, and I think that's why everyone is here. We're all
trying to do everything we can to keep deaths off of our
hands and off your hands, and to keep the people we love from
having cancer, from being sick and from dying and watching
people go through that kind of pain.
I don't know if you'll be here watching when people
are going through that kind of pain, but a lot of us will be.
It just seems to be, it seems to me to be necessary for
people to come into contact with organizations like CARD and
to really get some mass behind this opposition to this
because we can't necessarily depend on you. And I hope you will try to protect us now.

This man just before said that he rejoiced when you were formed and I hope we can all rejoice again at the Environmental Protection Agency and get you out of the hands of people like Pete Domenici and people like that.

PRESIDING OFFICER: Thank you.

Next is Supra Kotser.

UNIDENTIFIED SPEAKER: She's not here.

PRESIDING OFFICER: Next is Jack Urrick.

JACK URRICK: My name is Jack Urrick and I'm with the Sandoval County Green Party, and although I'm speaking for myself as an individual, the Green Party is opposed to the WIPP site and to the WIPP project, but I'm speaking as an individual tonight.

I wasn't quite sure what I wanted to say or even whether -- I felt like Allan, you know, that spoke earlier, Allen Cooper, is it worth it to even bother to say something.

But I've got an eight-year-old grandson, and when he asked me
where I was, I want to at least, you know, I said my peace

and spoke out against this insane project.

And then I thought well, maybe I can say something

really cool and spiffy like is this the environmental

protection agency or environmental prostitution agency, but I
didn't really want to insult the prostitutes. But, hey, both
of you are kind of in the same situation, you're going
through the motions to get along and get by and you're in a
tough situation because you have an enormously powerful bully
named Pete Domenici who has basically bullied you into
ignoring basic scientific evidence, questions that we've been
asking since I began to study the WIPP project eight years
ago like what's the characteristics of the waste. Because we
know at least since 1991, when the EEG found evidence that
there is an enormous amount of explosivity to a lot of the
waste in the cans, because we have evidence that some of the
cans have actually exploded.

So why would any rational scientific person want to
put something in the ground they hadn't characterized yet and
why would a protecting agency not want to protect us on that
if that's what they are about.

Why would they go ahead and accept an application
that didn't complete the characterization of the site still
refuse to answer questions that have been asked for 10 or 15
years that were raised much more ably than I by Dr. Phillips
and others. And the reason they don't have the answers to
the questions is because they don't want to find out the
answers to those questions because they aren't the right
answers.

As we all know, the Department of Energy when they
don't get the answers they want, then they hire someone else
that will give them the answers they want. That's how they
came to approve the WIPP site. They didn't work in one place
so they moved it over a little. It didn't work in Kansas, so
they moved it here to New Mexico, getting it to fit in a
pseudoscientific framework. But the question is why you are
approving that. Why you are going along with that, and I
guess the final answer really, because I'm afraid I do
believe it's a done deal. And whatever your personal
beliefs, there's nobody here with the guts to really stand
up. And if you do, we can't really promise you anything for
coming over to the other side. I mean if you look at the
scientists that aren't working for Sandia, they didn't go on
to be well off. They had a difficult time of it because they
stood up against the DOE. And the DOE is enormously
powerful.

The military industrial complex runs this country.

So for you to do that would take an enormous amount of
courage and I wish you had it. I'd like you to have it but I
don't have a lot of faith in it.
So the question then becomes the question that the young gentleman raised here, and that is what are we going to do when that happens and those trucks roll. I can't promise you there's going to be thousands of people out there. I sure hope there are.
But I can promise you that I'm going to be there with my friends, and so I'll be able to say to my grandson and my children when they ask me where I was, I was there trying to stop this insanity. And I hope some of you find the guts to try to stop it too. Thank you.

PRESIDING OFFICER: Thank you.

There's another lady in the back who wanted to speak.

MARIA SANTELLI: I have just a brief thing to say, it's partly a plea. These are called hearings, so what I would like to ask of you is please hear us. As I believe it was Sally Alice who said before, the people who spoke as proponents of this project all have vested economic interest in the project. Their jobs, their income, their livelihoods will continue if the production of nuclear weapons continues. We who have spoken out as opponents to the project, we're public citizens. Most of us probably live at the poverty level in New Mexico. I know that I do, but I'm very comfortable here and very happy here and I wouldn't it any other way.
So what I'm asking you to do is listen to the people. We've kept this away. You've become coming for 20 years. For some reason, because we're saying no, we're saying we don't trust this project, I'm asking you to listen to Dr. Phillips. I heard chatter during his testimony today.
and I wondered why are those people talking while he's speaking, why are they not listening. Then I saw a few of these people get up and speak in favor of the project. And I said to myself, they don't want to know. They don't want to hear the opposing facts that go against their livelihood and their jobs and their pocketbooks.

So what I'm asking you to do is listen to us and hear us. Hear what my friend Bay said, we will not back down. We will protect ourselves in whatever capacity we need to. But we'd like for you to do it. Don't take the P out of EPA. Thank you.

PRESIDING OFFICER: Can you give us your name?

MARIA SANTELLI: Yes, Maria Santelli. I gave up my time for Dr. Phillips.

PRESIDING OFFICER: That's fine. Thank you.

Okay, Ms. Rendt.

LILY RENDT: Okay, I gave you a scientific explanation of why I oppose the methods that were used in DOE. But what I didn't give you and what I'd like to add to this is my concern not only about the people -- and I've been
a teacher for many, many years. I care very much about young
people like this girl that just spoke and my friend over
there that mentioned the biota as well as the people. It's
the animals that I'm very concerned with.
I'm concerned with the evolitional process of these
animals. And in dealing -- when I ask you to make sure that
the surveys are correct, it's because I really have a love
for the biota of New Mexico. I have spent a lifetime
observing them.

I'm not originally from this state. I'm from up in
Minnesota. When I came here to see all of these desert
animals and to study them year-round, because in Minnesota we
have so much Snow. My husband brought me here, he was a
native. He was a veterinarian and he loved this state.

He's going now due to, I think partly, due to
radiation. I'm not sure. I can't prove that. He's gone and
it will never be proved. But part of it is because he was a
stunt man during The Conqueror. And the Conqueror is a movie
that was taking place at the time of the Nevada test site,
and many of those people are dead. I think that the lung
cancer that he contracted had something to do with it.

He also went to Vietnam as a veterinarian in the
Army, and he went over there and he was exposed to Agent
Orange. So I'm not real sure what happened to him.

But I don't like nuclear contamination. I don't
even like the sound of it because I've lost members of my

family to this.

My son on the other hand, being in the Navy, went
to the Persian Gulf. I'm not sure he hasn't been
contaminated. So I have a real personal, personal aversion
to contamination.

But I'm still speaking for the animals. I'm speaking for the animals that if we don't get a data base on what they are now, how will we know how they have involved and how much of it was due to some sort of radioactive contamination.

If we don't understand the processes that are being presented, we will not know about our own processes. The animals help us to understand. They are indicators of the existence of life itself. I'm talking of and let me give you a humorous illustration.

The area was not assessed for orthopods and amphibians, and also the lights of the WIPP site attracts insects. Insects are one of the lowest forms of the food chain. All the other animals eat it. It isn't just one animal or another being endangered or another animal, they are all connected.

Every animal contributes to the food chain. That's what we call an ecological food chain. But here's where I say were these people asleep at night even though they were
dealing with nocturnal animals? Had they no importance of

insects in the food chain of small animals? As far as I can

see from the reports, only soil microbials were listed,

again too selective.

Where is the data on the insects? How can an
assessment of an area possibly not include a description of
the arthropods and amphibians? Don't they watch sci-fi
movies and descriptions of black lagoon monsters and other
deformed mutants? Wouldn't they too like to deal with the
reality of what does happen around nuclear dumps, after all
spiders the size of two story buildings would take years to
evolve.

At best and even though the half life of
transuranic waste is 10,000 years, wouldn't they like to
leave a legacy of knowledge for future generations so that
some muscular Conan can find it and decipher it?

Every movie of this kind depicts a careful
scientist who has left a legacy. How can we follow the
trends of evolution without these preliminary findings? We
need to have a data base. And you people can still do
things. Even you can require these people to make a decent
assessment. We can still save the show partly.

I strongly recommend too that you consider this
approval until such things are evaluated properly, because it
is very important to our future biological knowledge to know
21 these things.

22 PRESIDING OFFICER: Thank you.

23 KATHERINE MONTANO: I don't know if today I told

24 you the trucking company out of Albuquerque that was paying

25 the WIPP drivers to move the nuclear waste to the WIPP site,
I just want you to know, don't confuse it from facility to facility. They moved it to WIPP.

The name of the trucking company is Martinez, and they are located on Tramway. And then you can also check out the trucking companies out of Taos. Taos is a very small town so I'm sure you'll find out who the trucking company is there. And then also find out from the Department of Transportation through Mr. Pena. I'm sure he knows all of the dirty secrets that he did when they moved all of this nuclear waste.

Also I hope you do an investigation because where the area at WIPP is decommissioned, that is where the nuclear waste is at. And it's not booties and tools, it's high level stuff.

It's sad that these poor truck drivers that didn't have the knowledge about radiation got radiated for $150, because that's what they paid them for each load from Rocky Flats. Thank you.

PRESIDING OFFICER: Thank you.

JERRI STANFIELD: I'll be very brief. I didn't
plan on speaking tonight but I feel moved to. I don't really
have any affiliations except for the fact that I live on this
planet. And while I was listening to the people here	onight, it occurred to me that we seem to be the only animal
that doesn't understand that it is not defecate where you
sleep.

But we did have the foresight to create an agency because we knew we were going to mess up, and we knew we needed some kind of protector and some kind of watchdog. And you all are that agency, so I would like to ask you to protect us.

You have the chance to be the conscience of our race, and I just want to ask that you use your power or else we'll be forced to.

PRESIDING OFFICER: Thank you.

Would you give your name for the record.

JERRI STANFIELD: Jerri Stanfield.

PRESIDING OFFICER: Thank you. Yes, sir.

DR. JAMES EVANS: My name is Dr. James Evans. I bring you greetings from Dr. Charles Hider. Many of you will recognize his name. Charles was the first scientist that I know of who became deeply concerned about the possibility of radioactive waste being brought into New Mexico. He's in Colorado right now but I know he's here in spirit and many of you know him personally.
I would like to say to you I think we've addressed both your brains and your hearts. I hope you go and ponder and come to a rational and humane decision because I can guarantee you that should you proceed with the plan, that the trucks will not deliver radioactive waste to Carlsbad.
PRESIDING OFFICER: Thank you very much.

That concludes the list for this evening. We're going to start again tomorrow morning at 9:00. I thank all of you. It's quarter to 11:00, but obviously a lot of you care deeply about this issue and the staff is late.

We appreciate your time and effort in coming, and we'll see some of you tomorrow morning. So thanks again and have a good night.

(THE HEARING WAS CONCLUDED AT 10:50 PM.)
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