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DEFENSE NUCLEAR FACILITIES SAFETY BOARD
Los Alamos National Laboratory Public Hearing

TRANSCRIPT OF PROCEEDINGS
March 22, 2016
5:01 p.m.
Santa Fe Community Convention Center
201 West Marcy Street
Santa Fe, New Mexico

REPORTED BY: Stephanie Slone, RPR, CSR, CCR No. 505
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(5105L) SS

1 APPEARANCES

2 BOARD MEMBERS:

3 JOYCE L. CONNERY, CHAIRMAN
SEAN SULLIVAN
4 DANIEL J. SANTOS
BRUCE HAMILTON

5

6 BOARD TECHNICAL STAFF:

7 JOHN A. PASKO
CHRISTOPHER BERG, Ph.D.
8 DOUGLAS J. BROWN, Ph.D.
DANIEL B. BULLEN, Ph.D.
9 MICHAEL W. DUNLEVY
TIMOTHY J. DWYER
10 NATHAN M. GEORGE, Ph.D.

11 DNFSB COUNSEL:

12 JAMES P. BIGGINS, ACTING GENERAL COUNSEL
NEYSA M. SLATER-CHANDLER, ASSOCIATE GENERAL
13 COUNSEL

14 ALSO PRESENT:

15 THE HONORABLE MADELYN CREEDON
THE HONORABLE MONICA REGALBUTO
16 DOUGLAS HINTZE
KIMBERLY DAVIS LEBAK
17 RICHARD KACICH
DAVID FUNK

18

19

20 I N D E X

21 EXHIBITS MARKED OR IDENTIFIED

22 DOE 1 "Providing Additional Pressure Relief 55
23 to the Remediated Nitrate Salt Drums"

24

25

1 SANTA FE, NEW MEXICO; TUESDAY, MARCH 22, 2016

2 5:01 P.M.

3 CHAIRMAN CONNERY: Good evening, ladies
4 and gentlemen. We're going to go on the record
5 right now.

6 My name is Joyce Connery, and I'm the
7 Chairman of Defense Nuclear Facilities Safety Board.
8 I will preside over tonight's public hearing. I
9 would like to introduce my colleagues on the board.

10 To my left is Board Member Sean Sullivan.
11 To my right is Board Member Daniel Santos. Next to
12 Mr. Santos is Board Member Bruce Hamilton. Vice
13 Chairman Jessie Roberson is unable to attend this
14 evening's hearing due to a scheduling conflict, but
15 we five constitute the Board.

16 Before we continue I want to give you a
17 small safety message. As you can tell, the exits
18 are to both your right and to your left. And in the
19 case of an emergency, I would ask you to follow our
20 staff out those exits. And if our staff could stand
21 and identify themselves. So look around. Follow
22 one of these fine folk out the door should there be
23 a need to do so.

24 If you need the restrooms, they're out
25 this door and to the left.

1 And before we continue the proceedings, I
2 would ask that we take a moment of silence in
3 recognition of the tragic loss of life in recent
4 terrorist attacks across the globe.

5 Thank you.

6 I'd also like to introduce our Board's
7 Acting General Counsel, Mr. James Biggins. He's
8 seated to my far left. And to my far right is
9 Acting Technical Director Mr. Timothy Dwyer.
10 Several members of the Board staff closely involved
11 with the oversight of the Department who manage
12 these Defense Nuclear Facilities at Los Alamos
13 National Laboratories are also here.

14 The purpose of this hearing is to gather
15 information on potential hazards to the public and
16 workers posed by the storage and processing of
17 transuranic waste at Los Alamos National Laboratory,
18 and DOE [Department of Energy] has plans to address
19 them.

20 As many in this room know, on February 14,
21 2014, a transuranic waste drum created here at LANL
22 [Los Alamos National Laboratory] underwent an
23 energetic reaction that caused a release of
24 radioactive material at the Waste Isolation Pilot
25 Plant, or WIPP.

1 Subsequent investigations by the
2 Department of Energy highlighted the hazard posed by
3 this particular waste form, which was referred to as
4 inappropriately remediated nitrate salt-bearing
5 waste, or RNS for short. Over several hundred
6 containers with this waste form were generated at
7 LANL, and currently 60 of these containers are
8 stored above ground at Area G.

9 During this hearing the Board will receive
10 testimony on the susceptibility of RNS waste to
11 potential accidents that could result in the release
12 of radioactive materials, the controls put in place
13 to protect this waste from such potential accidents,
14 and plans for treatment of the waste. The Board is
15 also interested in understanding potential hazards
16 to the workforce and the public posed by management
17 of all transuranic waste at Area G, especially
18 during New Mexico wildfire season. A wildland fire
19 can occur when conditions are hot, dry, windy
20 usually in the spring and early summer months.

21 In addition to the RNS waste, the
22 laboratory contractor has identified several other
23 potential inadequacies with the Area G safety basis.
24 The safety basis is important because it is the tool
25 that DOE uses to document potential hazards and

1 identify appropriate safety controls for improving
2 the protection of the public and workers.
3 Consequently, the Board seeks to learn DOE's views
4 and acceptance of risks associated with Area G,
5 including adequacy of safety controls currently in
6 place for RNS waste and other waste stored at
7 Area G.

8 The Secretary of Energy directed the
9 transition of legacy transuranic waste cleanup
10 mission from the National Nuclear Security
11 Administration to DOE's Office of Environmental
12 Management in order to address the issues that were
13 identified after the WIPP accident.

14 The Board wishes to hear from NNSA
15 [National Nuclear Security Administration] and DOE
16 Environmental Management about how they support this
17 transition and learn if any complications may arise
18 from the transition. The Board also seeks to
19 understand what corrective action DOE-EM [Department
20 of Energy; Environmental Management, or Office of
21 Environmental Management], NNSA, and the laboratory
22 contractor have undertaken to address the underlying
23 causes of the 2014 accident and the progress they
24 have made in implementing these actions.

25 Finally, given that neither Area G nor

1 WIPP is taking any additional waste at the moment,
2 the Board would like to understand the impacts on
3 transuranic waste-generating activities across the
4 laboratory, most of which are key to improving
5 safety at other LANL nuclear facilities such as
6 PF-4. Therefore, this public hearing will focus on
7 three main areas: Potential hazards posed to the
8 public and workers by waste stored at Area G,
9 actions taken or planned to address inadequacies and
10 the current safety basis of the various facilities
11 that manage or store transuranic waste, and actions
12 taken to improve transuranic waste management at
13 Los Alamos in response to the challenges created by
14 the backlog of materials due to the WIPP closure as
15 well as actions taken to address the root cause of
16 the WIPP accident identified by the associated
17 investigative findings.

18 Tonight's order of business will include a
19 statement from the Board's Technical Staff and
20 testimony from two panels. The first panel includes
21 Ms. Madelyn Creedon, the principal Deputy
22 Administrator of the National Nuclear Security
23 Administration; Dr. Monica Regalbuto, the Assistant
24 Secretary for Energy -- for Environmental
25 Management. The second panel will include

1 Mr. Douglas Hintze, Manager of DOE-EM Los Alamos
2 Field Office; Ms. Kimberly Davis Lebak, Manager,
3 NNSA Los Alamos Field Office; Mr. Richard Kacich,
4 Deputy Director of the Los Alamos National
5 Laboratory; and Dr. David Funk, Deputy Associate
6 Director for Environmental Management at LANL.

7 This evening's hearing was publicly
8 noticed in the Federal Register on March 4, 2016, in
9 order to ensure accurate and timely information.
10 This hearing is being recorded through a verbatim
11 transcript, a video recording, and live video
12 streaming. The transcript, associated documents,
13 public notice, and video recording will be available
14 for viewing in our public reading room in
15 Washington, D.C. In addition, an archived copy of
16 the video recording will be available through our
17 website for at least 60 days.

18 As stated in the Federal Register Notice,
19 we welcome comments from interested members of the
20 public present at the hearing. This part of the
21 hearing will begin at approximately 8:00. A list of
22 speakers who have contacted the Board is posted at
23 the entrance of this room. We have also -- we have
24 generally listed the speakers in the order in which
25 they contacted us or, if possible, when they wish to

1 speak. I will call the speakers in this order and
2 ask that speakers state their name and affiliation
3 at the beginning of the presentation.

4 There's also a table at the entrance of
5 this room with a sign-up sheet for members of the
6 public who wish to make a presentation but did not
7 have an opportunity to notify us ahead of time.
8 They will follow those who have already registered
9 with us in the order in which they sign up.
10 Depending on the number of speakers wishing to make
11 a presentation, we ask speakers to limit their
12 original presentation to three minutes. I will give
13 consideration to additional comments should time
14 permit.

15 Presentations should be limited to
16 comments, technical information or data concerning
17 the subject of this public hearing. The Board
18 Members may question anyone making a presentation to
19 the extent deemed appropriate.

20 The record of the hearing will remain open
21 until April 22, 2016. Until that date members of
22 the public, including those observing today's
23 hearing via video streaming, may submit a written
24 statement to the Board to be included in the record.
25 Written statements and documents may also be

1 submitted to the Board staff at the table at the
2 entrance to this room or to the address listed at
3 the Board's website at www.dnfsb.gov. The Board
4 reserves its right to further schedule and regulate
5 the course of any hearing, to recess, reconvene,
6 postpone, or adjourn any proceeding and to otherwise
7 exercise its authority under the Atomic Energy Act
8 of 1954 as amended.

9 I will now turn to my Board Members for
10 opening remarks should they have any.

11 Mr. Sullivan?

12 MR. SULLIVAN: No remarks.

13 CHAIRMAN CONNERY: Mr. Santos?

14 MR. SANTOS: I have no remarks.

15 CHAIRMAN CONNERY: Mr. Hamilton?

16 MR. HAMILTON: No remarks,

17 Madam Chairman.

18 CHAIRMAN CONNERY: Thank you.

19 This concludes the Board's opening
20 remarks. At this time we will continue with a
21 statement from the Board's Senior Technical Staff.

22 The Board recognizes Mr. John Pasko who
23 leads the Board's Nuclear Materials Processing and
24 Stabilization Group, accompanied by members of the
25 DNFSB Technical Staff. He is briefly going to

1 discuss the Board staff's perspective on the LANL
2 transuranic waste management including associated
3 hazards and controls, safety basis issues affecting
4 transuranic waste, interim storage facilities, and
5 contractor and federal corrective actions resulting
6 from the WIPP radiologic release.

7 Mr. Pasko, please proceed.

8 MR. PASKO: Thank you, Madam Chair and
9 Board Members. I appreciate this opportunity to
10 represent the Technical Staff tonight and to outline
11 the current situation concerning Los Alamos National
12 Laboratory's transuranic waste management.

13 The purpose of my statement tonight is to
14 provide background information in order to assist
15 the public in understanding today's proceedings. A
16 handout listing acronyms and definitions used in my
17 remarks and then later in the proceeding that you're
18 likely to hear is available at the room entrance.

19 The capability to safely manage
20 transuranic waste is critical to the many operations
21 at LANL, including closure activities at Area G and
22 key risk reduction activities at the Plutonium
23 Facility and the Chemistry and Metallurgy Research
24 Facility.

25 Transuranic waste operations at the lab

1 involve storing, processing, packaging, and shipping
2 facilities to deal with both legacy and newly
3 generated transuranic waste with legacy waste being
4 defined as waste generated prior to 1999. The
5 Department of Energy, Office of Environmental
6 Management, the National Nuclear Security
7 Administration, and the laboratory contractor must
8 safely manage both of these waste streams in order
9 to achieve the important mission of the Los Alamos
10 National Laboratory.

11 Area G provides LANL's current capability
12 for storage and certification of transuranic waste
13 prior to off-site shipment. Today's above-ground
14 waste inventory includes about 3,500 containers,
15 including 2,000 that require remediation prior to
16 shipment. Area G is currently not accepting
17 additional TRU [Transuranic] waste due to concerns
18 with the accuracy of its safety basis.

19 The Waste Characterization, Reduction, and
20 Repackaging Facility, or WCRR is used to remediate
21 repackaged transuranic waste. It's the only such
22 facility at the laboratory. The WCRR facility is
23 currently not operational, awaiting physical
24 upgrades to the structure and safety basis
25 modifications. The Radioassay and Nondestructive

1 Testing Facility, which is referred to as the RANT
2 Shipping Facility is used to prepare and load waste
3 payloads for off-site shipment. RANT is also
4 currently not operational.

5 Newly generated TRU waste continues to be
6 produced primarily in support of risk reduction
7 activities. Due to the shutdown of WIPP,
8 transuranic waste is accumulating at laboratory
9 nuclear facilities. At the Plutonium Facility,
10 personnel have identified interim storage locations
11 for this waste. However, as waste continues to
12 accumulate, risk reduction efforts may be impacted.
13 The transuranic waste facility, which is scheduled
14 to become operational in 2017, will provide
15 additional location for waste storage.

16 In addition to the issues resulting from
17 the inability of WIPP to accept transuranic waste,
18 Area G faces other near-term challenges. It is a
19 storage location for 60 inappropriately remediated
20 nitrate salt-bearing containers, or RNS waste, with
21 contents similar to the drum that underwent an
22 exothermic event at WIPP. Challenges exist with
23 both storage and treatment of these containers. To
24 gain a better understanding of the hazards
25 associated with RNS risk, let's review its history.

1 At the Plutonium Facility nitric acid was
2 utilized to recover and purify plutonium to support
3 the U.S. nuclear mission. In the 1980s
4 post-processed acidic solutions were concentrated
5 via evaporation to form nitrate salt residue. To
6 meet WIPP waste acceptance criteria, free liquids
7 were neutralized and mixed with a supposedly inert
8 absorbent material to reduce the oxidizing potential
9 of these salts. In March 2012, processing of
10 nitrate salts was put on hold due to LANL contractor
11 work concerns about the compatibility of the organic
12 polymer absorbent WasteLock 770 with the nitrate
13 salt mixture. The LANL Difficult Waste Team
14 identified this organic polymer as an inappropriate
15 absorbent and recommended an inorganic absorbent
16 material be used instead. This material has been
17 commonly referred to as kitty litter.

18 My use of "organic," "inorganic" refers to
19 the chemical definition, the presence or absence of
20 hydrocarbons. In October 2012 the contractor
21 incorrectly transitioned to an organic kitty litter
22 absorbent material. Use of this organic absorbent,
23 which is a fuel, during remediation of nitrate
24 salts, which are oxidizers, resulted in a fuel
25 oxidizer mixture within the waste containers. In

1 December 2013, Drum No. 68660 was generated at the
2 laboratory using the inappropriate organic absorbent
3 and subsequently shipped and then placed in Panel 7,
4 Room 7, of the WIPP underground facility in
5 January 2014.

6 On February 14, 2014, a radiological
7 release event occurred at WIPP contaminating
8 portions of the underground mine and causing
9 low-level internal exposure of more than 20 workers.
10 Subsequent investigations revealed that Drum 68660
11 was the origin of the release.

12 In response to this discovery, in May 2014
13 LANL implemented compensatory measures to address
14 the potential for a similar event with the 60 drums
15 of RNS waste stored at Area G. The LANL contractor
16 overpacked these drums in robust metal containers
17 and placed them inside an Area G sheet metal
18 structure containing fire suppression, temperature
19 control, high efficiency air particulate filtration,
20 and radiological continuous air monitoring systems.

21 During this time the Accident
22 Investigation Board, Technical Assessment Team, and
23 LANL Chemistry Research Teams further investigated
24 the cause and mechanism for the radiological
25 release. From these investigations it was learned

1 that the release event likely resulted from a
2 self-initiated exothermic reaction involving the
3 nitrate salt oxidizer and the organic absorbent
4 fuel. A series of chemical reactions led to
5 temperature buildup and pressurization within
6 Drum 68660, which resulted in eventual failure and
7 release of the drum contents.

8 In this April 2015 report, the DOE
9 Accident Investigation Board identified that the
10 amount of radiological material released from this
11 event was significantly greater -- by two orders of
12 magnitude -- than from events analyzed by DOE
13 standards. As a result, exothermic reactions for
14 RNS waste containers in Area G have the potential
15 for serious radiological release.

16 As residents of the state well know,
17 wildland fires were a significant hazard in northern
18 New Mexico with the 2000 Cerro Grande fire and 2011
19 Las Conchas fire providing stark examples of the
20 potential threat to the Los Alamos area. External
21 insults to RNS waste, such as heating due to a
22 wildland fire, have the potential to initiate an
23 energetic exothermic reaction.

24 As to the Area G safety basis there are
25 four -- currently four significant Potential

1 Inadequacies of the Safety Analysis, or PISA,
2 associated with the Area G facility. The PISA
3 process is how the Department of Energy and its
4 contractors are supposed to handle new information
5 that might impact the safe operation of a nuclear
6 facility. This process requires contractors to
7 place the affected facility in a safe condition,
8 expeditiously notify the Department of the
9 situation, determine if there are any unreviewed
10 safety questions, and complete an Evaluation of the
11 Safety of the Situation, or ESS. The ESS is a
12 formal written mechanism that describes the
13 condition associated with the PISAs. It includes
14 the operational controls required to maintain the
15 facility in a safe condition and the safety analysis
16 supporting these controls.

17 These four significant Area G PISAs
18 declared in 2015 include inaccuracies in the amount
19 and composition of the material at risk, the amount
20 of material likely to be released from certain
21 containers during a fire and impact of a wildland
22 fire -- and the impact of a wildland fire as I
23 described -- just described a moment ago.

24 All four of these PISAs influence the
25 potential quantity of radioactive material released

1 by a given accident at Area G and, therefore, the
2 potential consequence to the public and workers for
3 an accident scenario. Given the important role of
4 the ESS in formally establishing the safe condition
5 of a facility, DOE guidance states that an ESS
6 should be developed as soon as practicable and
7 should not take more than a month.

8 Finally, the DOE Accident Investigation
9 Report Phase II, report on the WIPP radiological
10 release event, identified a series of Judgments of
11 Need, or JONs, for the LANL contractor, the NNSA/EM
12 Field Offices, and DOE Headquarters. JONs
13 identified the root and contributing causes that, if
14 corrected, could have prevented the accident.

15 Examples of these JONs include:

16 The LANL contractor needs to develop and
17 implement a fully integrated Contractor Assurance
18 System that provides DOE and the contractor
19 confidence that work is performed compliantly, risks
20 are identified, and control systems are effective.

21 The NNSA Field Office oversight of
22 characterization and certification of transuranic
23 waste needs to be improved.

24 Three, DOE Headquarters needs to develop
25 and implement a comprehensive oversight program for

1 the National TRU Program activities, which include
2 Generator Site TRU Waste Programs, TRU Waste
3 Certification Program, and the Disposal System
4 Program.

5 Corrective actions have been established
6 by entities in response to these JONs.

7 The Board's staff has been closely
8 following these Area G issues. In addition to our
9 two resident site representatives, over a half a
10 dozen of our headquarters staff have actively
11 reviewed the analyses focused on determining the
12 cause of the WIPP event, the safe storage and
13 remediation plans for the RNS waste, the
14 implications of a wildland fire on all waste at
15 Area G, as well as the corrective actions planned
16 for the Judgments of Need. The staff will continue
17 to focus on these areas that impact public and
18 worker safety until the associated risks are
19 adequately prevented or mitigated.

20 This, Madam Chair, completes my statement.

21 CHAIRMAN CONNERY: Thank you, Mr. Pasko,
22 for that helpful background.

23 At this time I would like to continue the
24 hearing by inviting the first panel of witnesses to
25 the witness table. The first panel includes, as

1 mentioned earlier, Ms. Madelyn Creedon, Principal
2 Deputy Administrator for the National Nuclear
3 Security Administration, and Dr. Monica Regalbuto,
4 DOE Assistant Secretary for Environmental
5 Management.

6 We've set aside time for opening
7 statements by panel members, and the Board will be
8 provided with their written statements for public
9 record as well. After the opening statements are
10 made, the Board will ask questions of the panel
11 members. The other panelists may seek recognition
12 by the Chair to supplement an answer as necessary.
13 If either panelist would like to take a question for
14 the record, the response will be entered into the
15 record for this hearing at a later time.

16 Thank you, ladies, for joining us this
17 evening. And I'd like to open with the Honorable
18 Madelyn Creedon's opening statement. Thank you.

19 MS. CREEDON: Thank you, Madam Chairman,
20 Members of the Board.

21 I appreciate the opportunity to be here
22 this evening to discuss the safety of transuranic
23 waste operations at Los Alamos National Laboratory.
24 I have prepared a written statement that I will
25 submit for the record, but being mindful of the

1 time, I will briefly summarize that longer
2 statement.

3 Today I will address actions that the
4 National Nuclear Security Administration, NNSA, has
5 already taken or is planning to take that are
6 related to the radiological release event at the
7 Waste Isolation Pilot Plant in February of 2014.
8 The release at WIPP resulted from an unexpected
9 exothermic reaction and pressure buildup in a single
10 55-gallon drum of transuranic waste. This drum
11 failed and released radioactivity inside WIPP. The
12 drum was one of a number of nitrate salt drums that
13 were being remediated at Los Alamos.

14 A detailed Accident Board Investigation
15 was chartered to determine the root cause of the
16 incident. This investigation revealed that during
17 the course of the remediation an improper absorbent
18 material was used in the drums to absorb liquids.
19 Subsequent to the event, Los Alamos personnel
20 identified another 60 waste drums which are
21 currently stored at Los Alamos and which contain
22 similar waste remediated using the improper
23 absorbent. The question, then, is what about the
24 60 drums at Los Alamos. Is it possible that they
25 would suffer the same fate as the drum at WIPP?

1 Since February of 2014, Los Alamos and the
2 Department of Energy have looked at this question
3 extensively. Experimental evidence has now
4 demonstrated that the risk of a similar exothermic
5 reaction is minimized by controlling the pressure
6 and the temperature within each drum. As a result
7 of this finding and in consultation with the State
8 of New Mexico, DOE-NNSA developed and executed an
9 isolation plan to ensure the safety of these
10 60 waste drums. This plan involved placing the
11 drums into individual, large, robust metal
12 containers and storing containers in a climate cold
13 structure at Los Alamos. Each of the containers has
14 a filtered ventilation system, and a new
15 supplemental cooling system has also been installed
16 at the structure. The containers are closely
17 monitored every day.

18 Because we do worry about a fire and heat
19 buildup in structure, NNSA in partnership with the
20 DOE Office of Environmental Management has made
21 significant reductions in the available vegetative
22 fuel sources surrounding the structure; in other
23 words, the brush surrounding the general area has
24 been removed. We have also taken other measures,
25 such as developing firebreaks, to drastically lower

1 the probability that a wildland fire could endanger
2 these drums.

3 With air-conditioning in the structure and
4 the fire protection now in place, we are moving to
5 provide additional pressure relief mechanisms for
6 the key individual drums. With these new mechanisms
7 in place a reaction similar to what happened at WIPP
8 will be prevented by two independent means: One,
9 controlling the temperature and, two, controlling
10 the pressure of the drums. These measures remain in
11 place until the drums can be fully remediated.

12 In closing, I would like to reiterate
13 NNSA's commitment to working closely with EM and
14 with the State of New Mexico to ensure that all
15 appropriate efforts are made to reduce the risk
16 posed by the 60 transuranic drums stored at
17 Los Alamos.

18 And thank you, again, for the opportunity
19 to be here tonight, and I look forward to answering
20 any questions you might have.

21 CHAIRMAN CONNERY: Thank you.

22 I'd like to turn to Dr. Regalbuto now for
23 her opening statement.

24 DR. REGALBUTO: Chairman Connery,
25 distinguished Members of the Board, good evening and

1 thank you for convening this important hearing to
2 discuss transuranic waste management at Los Alamos
3 National Laboratory. The ongoing management of the
4 transuranic waste inventory at Los Alamos Laboratory
5 is the responsibility of two elements within the
6 Department of Energy -- the Office of Environmental
7 Management and the National Security Administration.

8 The Office of Environmental Management has
9 responsibility for the management and disposition of
10 legacy waste. This is waste generated prior to
11 fiscal year 1999, while the National Security
12 Administration has the responsibility for newly
13 generated waste. With the ongoing challenges
14 presented by shutdown Waste Isolation Pilot Plant,
15 commonly referred to as "WIPP," it has necessitated
16 that both program elements work closely in order to
17 ensure that transuranic waste at Los Alamos National
18 Laboratories is maintained in a safe and complaint
19 manner.

20 I personally communicate regularly with
21 the site and my colleagues within the National
22 Security Administration to ensure that we're both
23 working to the same end. We share a commitment to
24 ensure the ongoing storage, processing, and eventual
25 disposition of this waste are executed in ways which

1 protect the public, workers, and the environment.
2 Since the radiological event at WIPP on February 14
3 of 2014, the Office of Environment Management has
4 spent considerable effort to ensure it understands
5 what caused the release and what should be done to
6 prevent a future reoccurrence.

7 The event was investigated by the
8 Department of Energy led Accident Investigation
9 Board. This board identified on May 15, 2014, that
10 a drum, No. 68660, originated from Los Alamos
11 National Laboratory and was compromised in Room 7,
12 Panel 7, of the WIPP underground. It was later
13 determined by the Accident Investigation Board that
14 this was the only drum that was compromised in WIPP
15 and that a combination of incompatible materials had
16 been added to the drums resulting in an exothermic
17 reaction in the drum.

18 The Accident Investigation Board
19 culminated with an exhaustive review of the event
20 and published its findings on April 15 of 2015.
21 This report was very self-critical and identified
22 40 areas, or Judgments of Needs, that require
23 improvement in order to strengthen the Department's
24 Transuranic Waste Program. The accident of WIPP
25 caused DOE to fully evaluate its Transuranic Waste

1 Management Program, identify weaknesses, and begin
2 to make changes to strengthen the program at LANL
3 and across the other sites across the DOE complex.
4 DOE continues this process as well as improving its
5 oversight of compliance within the program to
6 prevent similar incidents.

7 Since the WIPP incident, the Los Alamos
8 National Laboratory, along with other elements of
9 the Department -- including the Office of
10 Environmental Management, our Carlsbad Field Office,
11 our Los Alamos Field Office, our contractor at WIPP,
12 Nuclear Waste Partnership, and the National Security
13 Administration Field Offices -- have corrective
14 action plans in place to strengthen each respective
15 organization's responsibilities for transuranic
16 waste management.

17 In addition, on September 25 of 2014, the
18 Secretary of Energy issued direction to the National
19 Security Administration and the Office of
20 Environmental Management to work collaboratively to
21 develop a plan for the transition of legacy cleanup
22 work at Los Alamos to an EM managed contract. Since
23 that time -- actually, one year ago to this date --
24 EM opened up the Los Alamos Field Office.
25 Mr. Douglas Hintze, manager of this office, will

1 speak to you as part of the second panel.

2 As part of this change, the contract for
3 legacy cleanup work was transitioned on October 1 of
4 2015 to the Office of Environmental Management and
5 work is being conducted on this contract, including
6 the ongoing management of the waste in Technical
7 Area 54. This contract, referred to as "the
8 Los Alamos Bridge Contract," is with the Los Alamos
9 National Security, or LANS. Significant management
10 attention and resources have been focused to ensure
11 the cleanup of the Los Alamos progresses, and waste
12 continues to be stored safety. To facilitate this
13 transition, the two Los Alamos Field Offices have
14 established a Memorandum of Understanding where
15 roles and responsibilities are clearly outlined
16 between the two field offices.

17 Technical Area 54 at Los Alamos National
18 Laboratory currently stores about 3,500 transuranic
19 waste containers above ground. These containers are
20 stored within metal containers under fabric domes.
21 The facility is categorized as a Hazard Category 2
22 Nuclear Facility according to the Department of
23 Energy orders. Given the potential hazards inherent
24 to the radiological waste stored, an evaluation of
25 these hazards is performed. This evaluation and the

1 controls generated by this analysis is part of the
2 authorization basis for the facility. In addition,
3 as a result of the self-scrutiny we have applied
4 since the radiological release at WIPP, we have
5 discovered additional new information, which
6 requires us to take further protective measures
7 regarding the waste that is stored in Technical
8 Area 54.

9 The current risk profile at Area G located
10 within Technical Area 54 is dominated by 60 drums
11 derived from the waste stream referred to as nitrate
12 salts. The waste stream was generated as a result
13 of the plutonium purification process conducted
14 three decades ago in Los Alamos and as it was
15 reviewed by the staff member who gave you the
16 background. These nitrate salts were incorrectly
17 remediated at Los Alamos when an organic absorbent
18 was added to these drums, resulting in two
19 incompatible materials being brought together -- an
20 oxidizing salt and a wheat-based organic absorbent.

21 Given the additional hazards that were
22 created during the remediation process, this waste
23 stream now presents additional unique hazards that
24 were not fully evaluated in the past. As a result,
25 we have taken near term actions to protect this

1 waste as described Ms. Creedon.

2 In order to fully understand what occurred
3 within the Los Alamos drum at WIPP, scientific
4 experiments have been conducted to help us
5 understand the reaction mechanisms. This knowledge
6 was used to inform us how best to safely store the
7 waste and ultimately how to treat and remediate the
8 nitrate salt waste.

9 This research demonstrated that
10 temperature and pressure are critically important
11 parameters that influence the chemical reactions
12 that are capable of occurring within this drum.
13 Therefore, the drums are stored in a
14 climate-controlled environment to control the
15 temperature parameter, and each drum is equipped
16 with a filtered drum vent. In order to ensure that
17 these drums do not become pressurized, we are
18 beginning a process to add a supplemental vent to
19 each of the remediated salt drums at Los Alamos to
20 support their safe storage.

21 Ultimately, the resolution of this risk
22 posed by the nitrate salt at Los Alamos is the
23 treatment of the waste. Treatment is being pursued
24 in a focused and methodical manner. Treatment
25 options are currently being evaluated.

1 The treatment of the remediated drums must
2 be executed in a way that ensures the safety of the
3 workers conducting the process as well as the safety
4 of the disposal facility at WIPP. I ask that the
5 selection process be extensively peer reviewed by
6 national laboratories, universities, and other DOE
7 sites to ensure that the selected option is sound
8 and will be effective when implemented.

9 I await recommendation from the
10 peer-review process on the path forward to
11 disposition.

12 In summary, the Office of Environmental
13 Management is committed to the ongoing safe storage
14 and treatment of all legacy transuranic waste in
15 Los Alamos and working closely with the National
16 Security Administration to manage and reduce risks
17 at Los Alamos. The Department has taken effective
18 steps and will take further steps to reduce the risk
19 associated with the storage of transuranic waste in
20 Area TA-54. These measures are providing effective
21 protection to the public, the workers, and the
22 environment.

23 Thank you for the opportunity to appear
24 here today. I look forward to answering your
25 questions.

1 CHAIRMAN CONNERY: I'd like to thank each
2 of you for your testimony this evening. I am
3 encouraged by the forward-looking activities that
4 you mentioned in your opening statements.

5 So we're going to move to the
6 question-and-answer portion of this hearing. And
7 I'm going to actually start, and then I'll turn it
8 over to my colleagues for additional lines of
9 inquiry.

10 But where I'd like to start, ladies, is
11 with the discussion of the transition to having the
12 Environmental Management Office operating at
13 Los Alamos and how NNSA and EM are going to work
14 together in terms of the division of labor. In
15 specific -- and I'll address this first question to
16 Dr. Regalbuto.

17 And, Ms. Creedon, you can answer as well.

18 But we're trying to understand how the
19 division of labor is going to work. Our
20 understanding is that the safety basis is still
21 owned by NNSA and that they will be preparing --
22 making preparations for work that goes forward but
23 that EM will have, obviously, input into that
24 process as well as have to concur in that process.

25 And just to quote your testimony earlier,

1 Dr. Regalbuto, you said that the challenges that we
2 had at WIPP were due to two incompatible materials
3 being brought together; and we hope that this is not
4 the case with NNSA and EM but that you are two
5 compatible materials that, when brought together,
6 will make things better. But we just want to hear
7 from you your views on that. Thank you.

8 DR. REGALBUTO: Thank you, Madam Chairman.
9 We are needing compatible materials, just
10 for the record. We're actually only one floor away.
11 So it's really -- we can knock on the floor and say
12 hello.

13 The challenge comes into standing [up] a
14 new facility, a new field office for EM at
15 Los Alamos. So we had a very small staff, and we,
16 you know, increased our staff capabilities to about
17 20 FTEs. And to really stand up the right
18 organization, we need 40 active FTEs. With that,
19 one of the most critical positions that need to be
20 filled up are any positions related to safety --
21 cognizant engineers, fire protection, and the like.

22 Because of this, we are doing this in a
23 two-phase approach. So the first phase, which is
24 the first two years, the DSA [Documented Safety
25 Analysis] is maintained by NNSA that has all the

1 infrastructure required to support the Documented
2 Safety Analysis. In the meantime, because we have a
3 Bridge Contract and we plan to transition around
4 fiscal year '18, we will be developing a new
5 Documented Safety Analysis, given the fact that we
6 are currently working on the BIO [Basis for Interim
7 Operation], not on DSA. And when we do that, we
8 will transition not only the DSA but the contract,
9 and we will have our fully staffed operations, which
10 our target is 40 FTEs.

11 We have already hired a group of people
12 that are going to come and help us write the DSA
13 so -- but it will not be available until FY '18. So
14 we will have to work under the current BIO until the
15 document is approved.

16 Other logistics -- you know, NNSA is the
17 landlord -- right? -- and as the landlord, they own
18 all the facilities. We do not own the facilities.
19 We own the operations that we conduct in those
20 facilities, but the safeguarding of those facilities
21 in terms of protective mechanisms and the like
22 remain the responsibility of NNSA.

23 And to give you an example, this is not
24 the first time that we share a space with other
25 landlords. Specifically with NNSA, Savannah River

1 site is a joint site also with NNSA. We have Office
2 of Science at Oak Ridge, the Office of Nuclear
3 Energy at Idaho. So we are familiar with these
4 mechanisms. It just takes time to stand up a new
5 office so we can do it safely.

6 I hope I answered your question.

7 MS. CREEDON: Hello. I have nothing to
8 add to that. I think that's very accurate.

9 One of the things that's most important is
10 that this transition be very smooth and it also
11 be -- and that it's very seamless. And so having it
12 occur over the course of the next two years
13 simultaneously with the transition to whatever
14 contracting structure EM decides to implement in
15 2018 is the right time scale. And so far it's been
16 very close; and, as Dr. Regalbuto said, we have a
17 lot of experience in working together at a variety
18 of different sites.

19 CHAIRMAN CONNERY: In any event, with this
20 difference of opinion as to, for instance, the
21 facility to use to remediate the 60 RNS drums or any
22 of that -- anything of that nature, how would you
23 decide the precedence of who makes that decision and
24 how it gets made?

25 MS. CREEDON: Well, as you might expect,

1 this whole series of events has extraordinarily
2 high-level attention in DOE, and so almost
3 everything associated with this whole issue has a
4 tendency to resolve itself at the very highest
5 levels of the Department.

6 So I think one of the things that's
7 important here is that we make sure that the lab,
8 our two respective field offices, have the technical
9 capability to really understand all of the technical
10 implications of the actions that we're taking now to
11 ensure the safety of the drums and the actions that
12 will be taken later to remediate the drums and then
13 can make the recommendations jointly up the chain.
14 If not, we have a lot of folks at headquarters who
15 are more than willing and have been willing and have
16 jumped in with this for a very long period of time.
17 So I'm not really worried about it.

18 DR. REGALBUTO: Let me just add that, you
19 know, the collaboration really -- we don't have to
20 wait until there's a difference of opinions. And
21 difference of opinions are welcome, and that is part
22 of the peer-review process.

23 We have an Integrated Project Team, an
24 IPT, that is composed by a number of different
25 entities, including entities outside of NNSA and EM,

1 that have good backgrounds they bring to the table.
2 We do it in a collaborative manner, and, you know,
3 everybody's in the same room at the same time, I
4 think, including your staff members. So, you know,
5 difference of opinions are actually welcome because
6 we have to view things in different ways; and
7 sometimes, you know, we know what we have done, but
8 others can come in with very good ideas.

9 So it's a collaborative process, and it
10 has so far resulted in a pretty good collaboration
11 among the two organizations. And like everything
12 else, everything happens at the field level. So the
13 field really is what -- you know, transfers that
14 knowledge and recommendations and moves up. So we
15 are very happy about the way the two elements in the
16 field have been working together.

17 CHAIRMAN CONNERY: And just my final
18 question along these lines has to do with
19 prioritization. It is an NNSA site. You have
20 priorities with regards to the mission itself.

21 And so I just want to have an
22 understanding from your perspective, Ms. Creedon, as
23 to where this issue falls in the prioritization.

24 MS. CREEDON: For a large number of
25 reasons, this is a very high priority. Obviously,

1 Los Alamos is a very complex, multidisciplinary site
2 that has a lot of tasks, all of which are very
3 important to the national security.

4 This one in particular is very high
5 priority. Among other things, it's extraordinarily
6 important that we get WIPP back open. So we share
7 in EM's goal of getting WIPP back open. It's also
8 important that we get Area G functioning again, that
9 we get these barrels remediated and shipped back to
10 WIPP when it opens.

11 And the long term and even the broader
12 implications, particularly with respect to WIPP, for
13 NNSA writ large is with respect to carrying out our
14 overall mission. Having WIPP reopened is
15 extraordinarily important not only for the
16 Los Alamos mission but for all of the NNSA missions
17 and all of the NNSA sites across the country as well
18 as many of EM's other sites. I mean, all of us rely
19 on WIPP to make sure that all of our missions keep
20 flowing and keep getting accomplished. So it's
21 extraordinarily important that we work together and
22 we resolve all these issues as safely and as quickly
23 as possible because it does have a long-term issue.

24 I would also say that specifically, from
25 Los Alamos and from the NNSA mission at Los Alamos,

1 it also is extraordinarily important because it has
2 an impact on how Los Alamos handles the newly
3 generated waste, which then also has a very direct
4 impact on mission. So it has many, many tentacles
5 in terms of its importance.

6 CHAIRMAN CONNERY: Thank you.

7 I'd like to turn it now -- turn the
8 questioning over to Mr. Hamilton for the next set of
9 questions.

10 MR. HAMILTON: Thank you, Madam Chairman.

11 Dr. Regalbuto, recognizing that y'all are
12 collaborative -- you have a collaborative
13 relationship, I'm going to ask these questions of
14 Ms. Creedon, but feel free to back her up.

15 Ms. Creedon, in your opening remarks and
16 also in your written testimony, you discussed how
17 the Department of Energy, NNSA, and contractor
18 personnel have completed extensive research,
19 testing, and evaluation of the remediated nitrate
20 salt waste following the WIPP release event.

21 Can you tell me about the hazards from the
22 other transuranic waste at Area G? I think the
23 number was 3,518. Can you tell me about the hazards
24 there?

25 MS. CREEDON: So what I would like to do

1 on this particular one is actually request some
2 assistance here but also possibly defer some of that
3 question to the technical panel, which is, in fact,
4 the panel that has most of the on-the-ground
5 knowledge about this. And it also is a little bit
6 how our various responsibilities are organized.

7 So the Office of Environmental Management
8 has -- and has had for a very long time --
9 responsibility for the legacy waste. NNSA has
10 responsibility for the newly generated waste. The
11 big change that happened about a year ago was the
12 way the contract structure is going to be sorted out
13 so that, as EM manages the legacy waste, they are
14 going to now do it under their own contract as
15 opposed to caring out their work under the contract
16 that we have at Los Alamos with LANS. So because I
17 think your question is primarily associated with the
18 legacy waste, I would want to defer some of that to
19 Monica.

20 But from our perspective, as was
21 indicated, these 60 drums are the highest priority,
22 and they are responsible for the highest fraction of
23 the concern.

24 DR. REGALBUTO: So related to the Area G
25 drums, obviously after the incident at WIPP, not

1 only did we do a very comprehensive sweep through
2 Area G, we did a comprehensive sweep throughout the
3 whole complex because the first question that comes
4 to our mind is what other drums have the same
5 characteristics as the drum that was breached at
6 WIPP. As given all the experimental data, it was
7 determined, you know, that there were very specific
8 oxidizing characteristics, and so we narrowed our
9 sweep to include those particular ones.

10 In Area G there's about 3,500 transuranic
11 containers. I'm calling them "containers" because
12 some are not drums. And 500 of those are what we
13 call "newly generated," and they do not possess
14 those characteristics. And there's another 3,000
15 that we call "legacy material," and those also do
16 not have those characteristics.

17 The only drums that we have that have the
18 same characteristics, which is an oxidizing element
19 and an organic component, are the 60 RNS drums that
20 we're currently focusing our work on. So not only
21 is Area G a concern of ours. It's also the rest of
22 the complex a concern of ours because we package
23 waste at different facilities. And so that was done
24 very quickly and promptly as soon as we developed
25 new information.

1 Now, keep in mind that to get more
2 information, it wasn't an instantaneous process.
3 You know, we have Phase 1 of the AIB [Accident
4 Investigation Board] report; Phase, you know,
5 2 and -- part 1 and 2 -- whatever. So as new
6 knowledge came in out of the Accident Investigation
7 Board, new data calls kept on going back and forth
8 to the sites. So for Area G specifically, the
9 concern is those 60 RNS drums.

10 MR. HAMILTON: If those 60 drums weren't
11 there, would we have seen the things you've done
12 recently -- put in place for the firebreaks and the
13 fire protection and all of the things you described
14 earlier, recognizing the venting was just for the
15 60 -- or the proposed venting is just for the
16 60 drums? But would all of those other things have
17 been necessary had it not been for those
18 60 improperly remediated drums.

19 DR. REGALBUTO: There were a couple of
20 things that we learned from the WIPP accident; and
21 that was, when the drum breached, the material that
22 was exposed had two or three orders of magnitude
23 higher than what was considered in the Safety
24 Analysis for TA-54 so -- or Area G, which really is
25 the storage facility, which is what we focus on.

1 There were other things that we -- as we
2 dig through and as more knowledge was acquired, for
3 example, the material at risk. There were some
4 historical data that was -- did not account for the
5 presence of Americium-241. So there were a number
6 of other things that were -- that we learned after
7 the incident, including how quickly did the drum
8 fail, given, you know, a pool of fire.

9 Given all of that -- and regardless of if
10 we had an oxidizing agent in combination with an
11 organic -- we still found other things that are
12 applicable to Area G, and that's why the DSA right
13 now is out of compliance, if we want to call it that
14 way, and that is why the fire protection
15 mechanism -- even if those 60 drums weren't there,
16 we would still have to do it because the assumptions
17 that were done were not -- when the accident
18 happened at WIPP, we came in with new knowledge and
19 concluded that the assumptions that have been done
20 in Area G for an event of a fire were no longer
21 appropriate.

22 MR. HAMILTON: Thank you. That's very
23 helpful. I have been studying this issue for
24 several months, and I think that's the first time
25 I've heard that explanation, that eloquent

1 explanation. So thank you.

2 Ms. Creedon, I want to talk about
3 emergency preparedness. What level of confidence do
4 you have that the contractor is prepared and will
5 respond appropriately to an emergency involving the
6 transuranic waste at Area G?

7 MS. CREEDON: So I'd like to start maybe
8 with a little bit of background.

9 Over the course of the last year and a
10 half, the Department at large has been
11 extraordinarily focused -- in fact, it's a renewed
12 focus -- on emergency management, the capabilities
13 of the Department to respond and manage any sort of
14 an emergency. We've referred to this as the
15 "all-hazard emergency approach." So with the focus
16 and attention that's happened and has taken place at
17 the headquarters level, that has also filtered out
18 across all of -- and I'll speak for the NNSA sites
19 at the moment, but I know across all the sites just
20 with a lot more focus and attention on emergency
21 management.

22 This was going on at about the same time
23 that the Board also had made a recommendation to the
24 Department on emergency management -- again, writ
25 large. And as we look at the emergency management

1 activities here at Los Alamos, our M&O [Management
2 and Operation] partner as well as the field office
3 have also been very focused on this. It's been part
4 of all the restart efforts that have been going on
5 here particularly at PF-4, and it continues to be a
6 very high priority.

7 I think this particular lab has had some
8 real-world experience in responding to the two fires
9 that had occurred here. No other site has gone
10 through quite the events that this site has had to
11 cope with. And so it is extraordinarily important.
12 Now, I know that there are some issues. And we
13 have -- in this very context, we have made it very
14 clear -- "we" NNSA -- have made it very clear
15 through our chief -- our Acting Chief Safety Officer
16 that we expect all of these new precautions that we
17 have put in place, these measures that we have put
18 in place -- that these need to be exercised at a
19 very local level. And we have made it very clear --
20 all of us understand -- that these have to be
21 drilled and exercised at the local level. So we try
22 to manage it from the very local area to a site and
23 to the Department as a whole.

24 MR. HAMILTON: Are you confident that the
25 employees at Area G, that local element, is -- that

1 they know how to respond? Have they actually
2 practiced emergency exercises and drills.

3 MS. CREEDON: They have. And I do have
4 confidence that they know how to respond. They had
5 one just recently.

6 MR. HAMILTON: No more questions on this
7 topic, Madam Chairman.

8 CHAIRMAN CONNERY: Thank you.

9 I'd like to turn now to Mr. Sullivan to
10 ask a few questions, if you would.

11 MR. SULLIVAN: Thank you, Madam Chairman.

12 And thank you to both of you for being
13 here. I extend my personal thanks. I know you're
14 busy people with lots to do around the country at
15 different places. So I appreciate your personal
16 attention to this significant issue.

17 So I'd like to start by asking
18 Dr. Regalbuto a little bit more about some of the
19 specifics that I think we've heard. We've heard
20 already that the 60 drums were placed in containers.
21 The containers are in an environmentally controlled
22 structure. There are firebreaks, and there's been
23 some brush clearing.

24 And there's been discussion of venting
25 these containers. Can you tell me a little bit more

1 about the venting? When will that happen? Do we
2 have a specific procedure that should be done in the
3 next few weeks? Months? Can you elaborate a little
4 bit, please?

5 DR. REGALBUTO: Yes. The current focus
6 is -- first let me tell you the bigger picture.

7 Right now is -- we're focusing on the
8 venting as an intermediate step, but the ultimate
9 goal is to remediate the solid waste. So venting
10 happens first while in the same time, in parallel,
11 we're developing the process flow sheet, which
12 determines what chemistry we're going to use and
13 what are the steps that we're going to do to
14 remediate ultimately -- you know, take care of the
15 problem, if you want to call it. And then we will
16 have to determine what will be the treatment, and
17 then where are we going to do that treatment, and
18 then ultimately execute the treatment for the
19 disposal at WIPP.

20 So right now the intermediate step is
21 we're going to do the pressure relief portion of the
22 drums. We're doing that in two phases. The first
23 phase is we're going -- these containers, or drums,
24 are normally packaged into two types of bigger outer
25 pack. Right? So it is the standardized waste

1 boxes, and some are pack over packs; so, you know,
2 bigger 75-gallon drums.

3 So the first ones that we're going to
4 tackle is the standardized waste boxes. The
5 standardized waste boxes are -- you know, they were
6 really sealed, and they're difficult to be opened.
7 So I imagine you have usually four drums inside a
8 standard waste box. So the first step, which is
9 getting the waste box open. So that is part of
10 Phase 1. And there is a procedure recently got
11 approved, and they are in the process of executing
12 that activity. So that will allow us to take the
13 drums out.

14 It's not the procedure yet to install the
15 larger vent into the drums. That procedure is
16 currently ongoing peer-review process and is not
17 ready to be signed and authorized by all the
18 parties, which is ultimately the DSA, as we
19 mentioned, is NNSA, but they're doing this in
20 collaboration with EM. So there is an EM
21 concurrence step as part of this. So what you will
22 see happening in the next few days is the removal of
23 the standardized waste boxes' lids.

24 At the same time there is a group of
25 people working on the process of how are we going to

1 remove the lid. And currently the vision is -- and
2 it may change if they determine that this is not a
3 good idea, a safe idea -- is we're not going to
4 drill them -- into the drums themselves. We're just
5 going to swap lids. So we're going to have our lids
6 prepared. I know that some of the rupture disks
7 have been procured. Some of the HEPA filters have
8 been procured and I think available for the public.
9 If I recall, there are some fact sheets for people
10 to pick up so they see exactly how the lids are
11 going to be swapped.

12 But that requires significantly more
13 thought process because now we have workers opening
14 a drum that we have not the most confidence. Right?
15 So we have to protect the workers and make sure
16 that, if by any reason there is any release, the
17 Perma-Con or whatever facility we're going to use to
18 do this has the right HEPA ventilation in the area
19 to protect, you know, the neighbors and, you know,
20 the workers outside of this facility, and then the
21 community at large. So that's where we are.

22 MR. SULLIVAN: Okay. Just to clarify,
23 your lack of confidence was in the drums, not the
24 workers?

25 DR. REGALBUTO: Correct.

1 MR. SULLIVAN: Okay. I thought that's
2 what you meant.

3 DR. REGALBUTO: Yes. Yes.

4 MR. SULLIVAN: I'm sure there are workers
5 listening, and I'm sure they just wanted to make
6 sure --

7 DR. REGALBUTO: But my job is to protect
8 the workers. So...

9 MR. SULLIVAN: I understand.

10 So I think we're talking weeks on the
11 venting. I'm not trying to hold you to a date. I
12 was just trying to get a sense for order of
13 magnitude in terms of time.

14 I had the occasion about two weeks ago to
15 go out and walk around this Perma-Con site where
16 these drums are and look at the cooling system. And
17 so we have a cooling system, which is going to
18 control the environment, and that should help in a
19 fire; but it didn't seem to me like there was any
20 real protection for the cooling system itself. I
21 mean, it's just sort of sitting outside. It's got a
22 single power supply. There's a blower that's
23 just -- it's a regular extension cord.

24 I mean, it just wasn't apparent to me that
25 if you actually had a large wildland fire that the

1 cooling system itself would survive. Has -- do you
2 know if anybody's looked at that?

3 DR. REGALBUTO: I appreciate you bringing
4 this up, and I will defer this question to the next
5 panel. But not only is the cooling system something
6 that we should be concerned during -- as you clearly
7 point out, during a fire. We also need to be
8 concerned about the integrity of the structure of
9 the Perma-Con. And I know that the models are still
10 being reviewed -- peer reviewed by Sandia that were
11 executed. And that -- and I will let the -- you
12 know, the site comment on that. But they have
13 looked at other ways to protect the perimeter of the
14 building itself. So I will just defer to the next
15 panel.

16 MR. SULLIVAN: Okay. And then have you
17 considered other things like fire blankets or
18 something that could be put over these containers
19 and maybe that would protect them if the cooling
20 system didn't?

21 DR. REGALBUTO: Yeah. So fire blankets
22 are definitely part of the upgrades that are being
23 done in addition to, you know, cutting the brush,
24 to -- I think they finished today. It's about
25 75 feet around the perimeter of the Area G, and then

1 the brush is -- should be shorter than five inches.
2 So that pretty much -- you know, if you just look at
3 the before and after pictures, it's -- obviously,
4 the vegetation is gone.

5 In addition there is, you know, the fire
6 blankets and also the firebreak that was done, and
7 there's also new procedures for the fire department
8 and how to apply the foam. So there's a number of
9 other things that have been looked at.

10 Ultimately, one has to think that
11 everything fails. Right? And that is why we
12 figure, if we relieve the pressure from the drums,
13 if we allow it to be relieved, then we will stop the
14 runaway reaction. So that is why we preventably are
15 going up to -- you know, making sure that we don't
16 allow those containers to overpressurize even in the
17 worst-case scenario because we have to plan for a
18 worst-case scenario.

19 But I'm hoping that the next panel will
20 address a little bit more of the details. But, yes.
21 The answer to your question is, yes, we are doing
22 some of that. So...

23 MR. SULLIVAN: Okay. I appreciate that.
24 And so my last question -- I heard --

25 MS. CREEDON: If it's possible --

1 MR. SULLIVAN: Go ahead.

2 MS. CREEDON: Just one more --

3 MR. SULLIVAN: Yes.

4 MS. CREEDON: -- thing on that one is
5 another piece of this would be, if there were a
6 situation where a fire looked as if it were possible
7 or imminent, there would also be a plan to
8 pre-position the fire response equipment at the
9 site. So it isn't just -- I mean, so it's multiple
10 layers of defense in depth that we -- that have been
11 looked at by both organizations.

12 MR. SULLIVAN: Well, thank you.

13 And so then I'm not sure which one I
14 should be asking the question to. So I'll just ask
15 the question, and whoever wants to answer it...

16 But I heard earlier Mr. Hamilton was
17 asking Dr. Regalbuto about the "other waste," not
18 the 60 drums. And I understood you said you learned
19 a lot about that including much more -- a much
20 higher fraction of material might come out if there
21 was a problem.

22 So I've also heard -- and I heard you
23 explain that there's an analysis, the DSA, the
24 Documented Safety Analysis, and NNSA is looking at
25 that. So maybe Ms. Creedon wants to answer.

1 But I haven't heard anybody say they've
2 done anything with any of that waste. So I'm just
3 trying to confirm. Has any -- we've talked a lot
4 about -- other than they cut down the wildland, the
5 brush. But any of the specifics -- venting, moving
6 anything, greater separation, cooling -- anything
7 for any of that other waste? Is there any other
8 specific measures that are currently planned for
9 that other waste?

10 DR. REGALBUTO: The more details -- the
11 next panel will tell you a little bit more, but I
12 can tell you a couple of things.

13 One is, once we realized the material at
14 risk was significantly higher, we stopped bringing
15 any new materials to Area G. So that was step No. 1
16 is no new additional inventory has come into the
17 area. And NNSA has put in a different plan for the
18 newly generated waste as of the day that this was
19 known. So they have storage areas at the PFP
20 [Plutonium Finishing Plant], and then the CMR
21 [Chemistry and Metallurgy Research) waste is going
22 to TA-55. So that is one thing that immediately
23 happened.

24 Second, the spacing of the containers did
25 change. And if you have the opportunity to tour, it

1 looks like wasted space. Right? As you walk,
2 there's like a pocket of little drums in there, and
3 then, you know, pretty far away is another pocket
4 and the like. That was another mitigation strategy.

5 Ultimately, you know, some of that waste
6 is, you know, ready to go, but there is no place to
7 go right now. So we have to do some intermediate
8 strategies until we're able to get our facility
9 functioning again. And then, again, this is not
10 only a concern for Los Alamos. It's a concern for
11 us across the complex because a lot of these
12 facilities have to be viewed now from the point of
13 view that -- you know, how much material can we keep
14 and to what point do we start packaging because we
15 don't have a path.

16 So it's all tangled up together. But,
17 yes, we do worry about every drum, not only the
18 60 drums. Every container is a concern for us.

19 MR. SULLIVAN: Okay. Thank you very much.

20 Madam Chair.

21 CHAIRMAN CONNERY: Thank you.

22 Ms. Regalbuto, you referred to one of your
23 handouts from the Department of Energy. Do you
24 happen to have an exhibit number listed on that one
25 for the record.

1 DR. REGALBUTO: I can give you a title. I
2 apologize. They didn't give me a number in here,
3 but it's "Providing Additional Pressure Relief to
4 the Remediated Nitrate Salt Drums." It's a
5 publication from Los Alamos National Laboratory and
6 is with the Office of Environmental Management and
7 NNSA. So I can certainly pass it along.

8 CHAIRMAN CONNERY: Yeah. I believe we
9 have those available for the public. And we had an
10 exhibit scheme, but I don't seem to have it with me.
11 So --

12 DR. REGALBUTO: Oh, I apologize.

13 CHAIRMAN CONNERY: No worries.

14 DR. REGALBUTO: Mine doesn't have a
15 number. Maybe somebody from the Board may know --
16 from the staff members.

17 MR. BIGGINS: Madam Chairman, we'll mark
18 that as DOE Exhibit 1.

19 CHAIRMAN CONNERY: Okay. Thank you, sir.

20 (DOE Exhibit 1 marked.)

21 CHAIRMAN CONNERY: Thank you for that.
22 Sorry for that little public service announcement.

23 I'm going to turn the microphone over to
24 Mr. Santos to ask his line of questioning.

25 MR. SANTOS: Thank you, Madam Chairman.

1 And thank you to both Ms. Creedon and
2 Dr. Regalbuto for being here today.

3 I'll start with Dr. Regalbuto, but you're
4 both welcome to answer.

5 Given the potential consequences
6 associated with these 60 RNS drums, can you help
7 explain for the public what other options were
8 considered for reducing the associated hazards. For
9 example, did you consider shipping these drums to
10 less populated areas, whether it's in the state or
11 other parts of the country or burying drums in an
12 internment fashion? What sort of constraints did
13 you have to work through, and what other options
14 have you looked at?

15 DR. REGALBUTO: Thank you very much.

16 Yes, we did consider other options. And,
17 actually, one of the options was actually being
18 executed when we found out that the drum that had
19 breached at WIPP came from Los Alamos. So at the
20 time when the incident happened, we did not know
21 that the breached container came from Los Alamos,
22 and we were in the process of, you know, trying to
23 finish our campaign because our concern with the
24 wildfires and, you know, continuing to progress on
25 that.

1 is to do the remediation the way we have done
2 remediation for this type of drum in other sites
3 across the country, and that is to solidify the
4 waste, do the dilution with the zeolites and the
5 like. So that is -- if you're going to move and
6 touch that drum, you might as well spend the
7 increasing risk to remediate it first. So below
8 grade or anything like that will not be a good
9 option for us because it will, again, expose the
10 workers to an unnecessary risk.

11 MR. SANTOS: Thank you.

12 Anything you would like to add to that,
13 Ms. Creedon?

14 MS. CREEDON: No. I think that's
15 absolutely correct. And it's also why that the
16 focus has been for all of us those 60 drums and
17 getting those 60 drums first vented and then
18 remediated and hopefully, when WIPP is open, then
19 shipped back down to WIPP. I mean, that is the
20 consuming portion of that area at Los Alamos.

21 MR. SANTOS: Thank you.

22 I'm going to shift topics a little bit.

23 Ms. Creedon, earlier today you made a
24 statement to the effect "everything happens at the
25 field level." And I would like to -- if you can

1 describe for us what level of involvement at the
2 NNSA headquarters in coordination with the
3 Los Alamos Field Office regarding the development
4 and implementation of the various corrective actions
5 that have been identified since the event. And if
6 you could give us an update on where the Department
7 is on those corrective actions.

8 MS. CREEDON: So our interaction with our
9 Los Alamos Field Office is pretty much constant.
10 There's so much going on at Los Alamos we -- I mean
11 in addition to these drums. There's just so much
12 going on at Los Alamos that our interaction at
13 various levels is, I mean, certainly daily when
14 you -- particularly when you look at all the staff
15 at headquarters and how all the staff at
16 headquarters interacts with the small staff at
17 Los Alamos. So it is a constant interaction.

18 You might also pose that question to our
19 field office manager in the second panel. My guess
20 is there's probably a level at which we've pushed
21 our contact probably too much. But as I -- you
22 know, I do believe -- and it is important for our
23 field office managers to be in charge of their
24 sites. Having our field office manager be our eyes
25 and ears on the ground, understanding what's going

1 on, and making all the decisions that they possibly
2 can make is an important aspect of being a field
3 office manager.

4 That said, the authority -- the safety
5 basis authority is an authority that's held at the
6 headquarters level, and it will continue to be held
7 at the headquarters level. And so that is -- and
8 that's for everything at Los Alamos. That
9 particular authority is held at the headquarters
10 level. And so that's another opportunity, if you
11 will, for headquarters to be very, very much
12 involved and very closely involved.

13 On the wide range of things, we get
14 updates, depending on the nature, at minimum,
15 quarterly on everything that goes on out here. We
16 have weekly staff meetings in which all of our field
17 offices participate, and that's also an opportunity
18 to raise various issues at that; and plus at any
19 given time -- and you'll hear from our field office
20 manager on the second panel -- that any time there's
21 any issue, she calls, she e-mails anybody at
22 headquarters and gets a prompt response. So it's a
23 very tight and seamless relationship.

24 MR. SANTOS: Thank you.

25 For my second part of the question, can

1 you give a high-level update on where you stand with
2 the corrective actions.

3 MS. CREEDON: Yeah, we do. I mean, in
4 particular on --

5 MR. SANTOS: Yes. Specific to this.

6 MS. CREEDON: Specifically on these we get
7 a lot of updates. There is also -- at headquarters
8 we have a series of meetings. Most of the time they
9 occur weekly and go through -- and everybody is part
10 of those -- it's department-wide -- and look at all
11 the varied issues associated mostly with these drums
12 and with the actions that are taken with respect to
13 these drums. So it isn't just NNSA that has a very
14 high level of attention. It's the entire department
15 that has a very high level of attention to
16 New Mexico.

17 MR. SANTOS: Another item is the -- one of
18 the items that came out was that federal oversight
19 and the functions needed as improvements. Could you
20 provide an example of actions taken by headquarters
21 to improve federal oversight at Los Alamos. And you
22 can both answer that.

23 MS. CREEDON: Yeah. Let me take this one
24 first because there's a philosophy going on here
25 that I want to talk about a little bit.

1 So NNSA is, in Monica's words, the
2 landlord of Los Alamos. And obviously one of the
3 findings and recommendations to come out of the
4 Accident Investigation Board was that oversight had
5 failed on a variety of different levels, you know,
6 in a variety of different corners of the department.

7 At the same time, the NNSA also was looked
8 at extensively by a congressionally mandated panel
9 chaired by Retired Admiral Richard Mies and Norman
10 Augustine. In that review there was extensive
11 criticism of the NNSA for too much oversight, for
12 having too much transactional oversight. So as we
13 look at both of these recommendations, we find
14 ourselves in an interesting place philosophically.

15 One of the things that we've been trying
16 to do as NNSA at large, as a result of all of this,
17 is trying to understand, with a very small federal
18 staff, what is it that we need to focus on from an
19 oversight perspective and where can we put reliance
20 on our various M&O partners.

21 So one of the major elements of that is
22 making sure that our -- all of our M&O partners have
23 a good, strong Contractor Assurance System and -- so
24 that we can look at the -- we can look at and use
25 our oversight and our resources from a system

1 perspective and understand in each of those
2 Contractor Assurance Systems that they are looking
3 at the right things, that we're seeing the results
4 in a common way, that we have -- that we're very
5 confident in what that assurance system is telling
6 us. So not only NNSA but M&O also has to have high
7 confidence in what that assurance system is telling
8 them.

9 We're also making sure that, going
10 forward, as we implement all of these various
11 reports, that the relationship between headquarters
12 and field -- and the field office is very clear
13 because, again, our field offices are the -- they
14 are there. They are our eyes and ears on the
15 ground. They are the ones who will see things and,
16 they're the ones that have to work with the
17 contractor.

18 Now, again, from an interesting
19 perspective, NNSA has historically put our oversight
20 energies on those things which have always had the
21 highest risk. And by "highest risk" I mean
22 radiological risk, risks to the public, risks to the
23 workers. When you look at this particular event and
24 the actual repackaging of the material that was
25 going on at the time, this was actually considered a

1 low-risk activity.

2 So all of this has caused us to think
3 about risk, and the Department itself has now stood
4 up a risk officer, a chief risk officer, to help us
5 think about risk. So now we're thinking not only in
6 the traditional way in terms of radiological risk,
7 safety risk, explosive safety risks to the public
8 and to the workforce. Now we're also looking at
9 other sorts of risks -- economic risk, which is
10 clearly what this was at the end of the day. This
11 is vast economic fallout, if you will, to the
12 Department; reputational risk.

13 So we're rethinking how we address risk
14 across the board with the Contractor Assurance
15 System and still be able to utilize our small
16 federal staff in the most effective way. So I know
17 that's a very long answer, but it's a very
18 complicated issue in how we approach our oversight
19 responsibilities.

20 MR. SANTOS: I really appreciate your
21 answer.

22 Dr. Regalbuto, would you like to add to
23 that from the EM's perspective?

24 DR. REGALBUTO: Well, it's not from the
25 EM's perspective -- you know, as Ms. Creedon very

1 eloquently articulated is the risk is really across
2 the Department; and, you know, just because it
3 hasn't happened to somebody else, it doesn't mean
4 there's no risk. Right? So one has to have that
5 thinking.

6 Regarding more specific to the WIPP
7 facility and how the corrective actions happen, it
8 was one of the -- probably the most enlightening
9 finding was when the Accident Investigation Board
10 said really the best way to protect the facility,
11 which is WIPP, is to extend our bounds of oversight
12 all the way to the generator. So basically since
13 that waste has been created until it gets to the
14 underground, we must be overseeing these three
15 things, the three activities.

16 So, one, it can easily be summarized as
17 telling WIPP you have to be a much more demanding
18 customer. Right? And that is one of the areas that
19 is being addressed under the new chapter of the DSA.
20 So that's Chapter 18; and that is, you know, we have
21 to be much more demanding because we have to protect
22 our facility. We see clearly the -- what happens
23 when you don't do that.

24 In addition, we have the generator, and we
25 have a certification program. So out of the results

1 of the AIB report is the certification program needs
2 to have a headquarters oversight to that program.
3 How do we know that the certification program is
4 actually addressing all the risk that Ms. Creedon
5 has spelled out. So we stood up a new organization,
6 new FTEs to do that oversight of that certification
7 program. In addition, trust but verify from the
8 generator's side. So a lot of acceptable knowledge,
9 a lot of things that have been -- you know, yes,
10 it's there. Now we're going back and checking very
11 specifically all this acceptable knowledge and
12 tracking it all the way from when that waste was
13 generated.

14 And this is not trivial because some of
15 our legacy waste is 30 years old, 40 years old.
16 Records are incomplete and the like. So in those
17 cases, we may have to do more work in the
18 characterization of those materials.

19 MR. SANTOS: Well, I want to thank both of
20 you for your public service. And since I've been to
21 the Board, from what I've observed is your continued
22 fostering of effective communications with the Board
23 and our staff and above all your continuous
24 commitment to safety.

25 Tomorrow I'll be at Area G, and I look

1 forward to having a productive discussion with the
2 workforce but also gain a better understanding of
3 the controls that are there, are planned, to ensure
4 worker and public safety. So in my oversight role,
5 I look forward to sharing any observations I may
6 have from my visit tomorrow with both of you.

7 Again, thank you for your service.

8 Madam Chair, I have no further questions.

9 CHAIRMAN CONNERY: Thank you, Mr. Santos.

10 The next set of questions goes to
11 Mr. Hamilton.

12 MR. HAMILTON: Dr. Regalbuto, I'd like to
13 talk just briefly about the National Transuranic
14 Waste Program. You said in your opening remarks
15 that the accident at WIPP caused the Department of
16 Energy to fully evaluate its Transuranic Waste
17 Management Program, identify weaknesses, and begin
18 to make changes to strengthen the program at
19 Los Alamos and across the DOE complex. You may have
20 been talking about some of this in your last few
21 comments.

22 Are those the kind of specific actions
23 you're taking to improve the National Transuranic
24 Waste Program? Are there other specific things that
25 you could share with us that you're doing to make

1 that a better program in light of the LANL issue?

2 DR. REGALBUTO: Yes. Thank you.

3 So some of the things that -- you know,
4 that you will be seeing obviously Chapter 18 of DSA,
5 that takes more of a facility point of view. In
6 addition to that, there are things that we have
7 already implemented; and that is, we have separated
8 the oversight functions from the operational.

9 So if you look at our WIPP org chart,
10 you're going to see that we did that not only for
11 the facility. We also did that for the National TRU
12 Program because it really is a -- it was conflicted
13 in the past. So it's completely separated, and then
14 there's a third layer, which is a headquarters
15 function, that oversees that those operations don't,
16 you know, get mismatched.

17 In addition to that, the site has been
18 working with the National TRU Program and with the
19 generators, and they have looked at their other
20 characteristics of waste that we have not evaluated.
21 This was the combination of oxidizers and organics.
22 What about other characteristics?

23 So we stood up a team, and the team went
24 through a very thorough review of all the waste that
25 has been previously generated and packaged and all

1 the waste that is currently moving forward. We
2 found out some waste streams that we have flagged,
3 and those have not been packaged. So that is a very
4 good thing.

5 But there's still a couple of things where
6 the National TRU Program was still questioning, and
7 those will be set aside. They will not be brought
8 to the underground until they resolve those issues.

9 So in the meantime, probably earlier in
10 the summer you're going to see a new plan that is
11 going to be put into place by the National TRU
12 Program, and we will be happy to come back and brief
13 you on the new plan. Todd Shrader, who is the field
14 manager at WIPP, is also in charge of the National
15 TRU Program. And with the team that they put
16 together, we'll come back and brief you on all the
17 details of what has changed from how we used to run
18 the National TRU Program and how are we going to run
19 the National TRU Program going forward.

20 So those are the things that are more
21 tangible, but we'll be happy to, you know, one, for
22 our monthly meetings, come back and brief you on
23 that.

24 MR. HAMILTON: Thank you, Madam Chairman.
25 I cede to Mr. Sullivan.

1 CHAIRMAN CONNERY: Okay, Mr. Sullivan.

2 MR. SULLIVAN: Thank you.

3 I think we only have a few minutes left.

4 So to Ms. Creedon, I just wanted to ask
5 you about impacts at some of the other facilities
6 here at LANL because, as Dr. Regalbuto said, Area G
7 is not accepting any more waste. So I know we're
8 still packaging waste at PF-4, CMR, WETF.

9 So is that impacting any of the operations
10 there? Do you have enough room to continue to keep
11 that waste basically in-house until we sort of get
12 things straightened out elsewhere in terms of moving
13 this waste?

14 MS. CREEDON: So it's not an impact yet,
15 but it's something that we are all collectively
16 keeping a very close eye on. We are obviously
17 moving things into TA-55, into PF-4 where there is
18 space. That obviously is not ideal, but there is
19 space, and it can be handled that way.

20 We -- I personally am also looking at the
21 long term. Obviously we have a commitment to be out
22 of CMR by 2019. We don't want to have any issues
23 there. So that's also a potential impact, although
24 we should have it all resolved long before then.

25 We have the new TRU waste facility that is

1 going to come online shortly in -- shortly after the
2 first of 2017. There's been some discussions about
3 the possibility of accelerating that opening. That
4 would also provide some relief in terms of space,
5 but it is a concern. There is some worry that at
6 some point -- don't know when the point is -- that
7 operations could conceivably have to shut down if we
8 don't resolve all of this.

9 One of the other things that Los Alamos is
10 also really focusing on and has taken the initiative
11 is to also look at how to reduce the amount of newly
12 generated waste. Nothing we can do about the legacy
13 waste that has to move around, but at least with
14 respect to the newly generated waste, they're being
15 very careful to make sure that, to the maximum
16 extent possible, they're generating as little as
17 possible so that they don't make this a bigger
18 problem in the near term. But it is something we're
19 keeping a very close eye on.

20 MR. SULLIVAN: Okay. So if I specifically
21 asked you, say, in the next two-year window, are you
22 reasonably confident for two years we're okay?

23 MS. CREEDON: Let me get back to you on
24 that.

25 MR. SULLIVAN: Okay.

1 MS. CREEDON: There are an awful lot of
2 variables on that, and I think we'd have to take a
3 really hard look. And I think what you'll find is
4 the answer would probably be a range with
5 conditions, but let me get you a much more detailed
6 answer on that one.

7 MR. SULLIVAN: So you'll take that for the
8 record?

9 MS. CREEDON: Uh-huh. I will.

10 MR. SULLIVAN: Thank you very much.

11 MS. CREEDON: Thank you.

12 MR. SULLIVAN: Okay. Madam Chairman.

13 CHAIRMAN CONNERY: Thank you. Are there
14 any other questions from our fellow Board Members on
15 this panel?

16 MR. SANTOS: No, Madam Chair.

17 CHAIRMAN CONNERY: I want to thank
18 Ms. Creedon and Dr. Regalbuto for your participation
19 in this process, your cooperation with the Board in
20 general, and your willingness to be so open and
21 honest about the challenges that you are facing at
22 Los Alamos.

23 And at this time I would like to excuse
24 our distinguished panel members, and we're going to
25 recess the meeting for a short break. The hearing

1 will be in recess and will reconvene promptly at
2 6:45 p.m.

3 Thank you both.

4 (Recess, 6:32 p.m. to 6:46 p.m.)

5 CHAIRMAN CONNERY: Can we reconvene,
6 please, in the interest of time. I know there's a
7 number of you that want to speak at the public
8 comment section. So the faster we can reconvene,
9 the more time we have for public comments. If I
10 could ask everybody to take their seats so we can
11 introduce the next panel and go back on the record.

12 Thank you for your patience. At this time
13 I would like to reconvene the hearing and continue
14 by inviting our second panel of witnesses to the
15 witness table. We are back on the record.

16 This panel includes Mr. Doug Hintze,
17 DOE-EM Manager at the Los Alamos Field Office;
18 Ms. Kimberly Davis Lebak, NNSA Manager at the
19 Los Alamos Field Office; Mr. Richard Kacich, Deputy
20 Director of the Los Alamos National Laboratory; and
21 Dr. David Funk, Deputy Associate Director for
22 Environmental Management at the Los Alamos National
23 Laboratory.

24 So if I could ask the panelists to take
25 your seats.

1 So for this panel we have not asked the
2 panelists to make opening statements, but you're
3 obviously welcome to submit any written statements
4 for the public record, if you wish to do so, after
5 the hearing. As previously stated, the Board will
6 ask questions of panel members. The other panelists
7 may seek recognition by the Chair to supplement an
8 answer as necessary. If any panelist would like to
9 take a question for record, the response will be
10 entered into the record of the hearing at a later
11 time.

12 So with that, I think I'll take the
13 Chairman's prerogative to start with the
14 questioning.

15 And I'd like to start, I think, with you,
16 Mr. Kacich, if possible. LANL spent considerable
17 time and resources investigating the generation of
18 the RNS waste that we spoke about earlier as well as
19 its associated hazards and the resulting safety
20 approach.

21 Can you summarize the efforts that you've
22 undertaken in this area and the results?

23 MR. KACICH: Sure. I'd be pleased to at
24 least start with responding to that question. And
25 I'll start by indicating that, as we came to

1 appreciate what had transpired with our drum at the
2 WIPP facility it became important for us to bring to
3 bear the entire resource component of the laboratory
4 in terms of understanding what happened -- and that
5 obviously took place incrementally over time -- and
6 then incrementally figuring out what to do about it
7 and very much a defense in depth risk-reduction
8 approach that covered our entire campaign. So a
9 very significant amount of modeling and testing and
10 analyses that were undertaken to identify what went
11 wrong.

12 And then you've heard earlier today and,
13 in fact, talked about it yourself to a degree with
14 respect to, again, the defense in depth that's in
15 place in terms of the drums inside a waste storage
16 box, inside a Perma-com, inside a dome, with
17 ventilation and temperature monitoring; significant
18 remediation measures in connection with the
19 reduction of the vegetation and fuel for a potential
20 wildland fire and so forth.

21 And I think I'll take the occasion to draw
22 the distinction about our TRU waste facility, which
23 is a new facility that has all the protections and
24 redundancies and safeguards against external
25 phenomena and so forth, because it was designed that

1 way, and contrasting that with what we were not able
2 to do with the RNS drums because we were just in a
3 situation that we had to make the most of it. But I
4 believe we've done that responsibly and will
5 continue to see it through until the day comes when
6 the 60th and final drum is remediated.

7 CHAIRMAN CONNERY: So just a follow-on to
8 that, and maybe it's to you or to Dr. Funk.

9 We talked a little bit earlier about the
10 conditions that Mr. Sullivan observed and some of us
11 who were out there observed with regards to the
12 Perma-Con. And perhaps some of the challenges we
13 saw with the temperature control and whether or not
14 that was -- it was enough defense in depth to
15 protect all of those layers that you have in place.

16 Can you just answer briefly some of the
17 questions that I think Ms. -- Dr. Regalbuto deferred
18 to this session?

19 MR. KACICH: I could certainly start, and
20 I think I will defer to Dr. Funk.

21 Obviously, in connection with the speed
22 with which elevated temperatures might occur in the
23 winter months -- and we've been experiencing
24 recently -- if we were to lose the cooling system,
25 it would be not particularly consequential at all.

1 And there are some instances where the amount of
2 time we would have to take action would be more than
3 sufficient to deal with whatever off-normal
4 conditions materialized.

5 And so we have a high level of cognizance
6 across the laboratory about the significance and
7 importance of this issue, and procedures and
8 awareness and training have been upgraded to reflect
9 that circumstance. And I'd like Dr. Funk to
10 contribute to that.

11 DR. FUNK: So I'd like to go a couple of
12 different directions.

13 First of all, I think there's directions
14 with respect to facility that Mr. Sullivan was
15 asking about and the potential threat that a
16 wildfire could have on the cooling system that we
17 have in place. We have begun looking at how we
18 could provide protections. There are plastic
19 components, et cetera, that need to be protected
20 from firebrands that could occur if a wildfire were
21 to take place. And we were looking at how to best
22 protect those assets from those firebrands.

23 In addition, we have started looking at
24 how to have supplemental power, as you alluded to.
25 It's actually not as easy as it sounds because the

1 distribution is quite significant and so adding that
2 supplemental power is going to be quite challenging.
3 So -- but we will be looking at that.

4 Now, from the technical side of the
5 nitrate salts themselves, or the remediated nitrate
6 salts, we do believe that the passage of time has
7 actually decreased the threat of both internal
8 runaway reaction but also has decreased the threat
9 of any external temperature posing a risk to the
10 material. The addition of the supplemental vent
11 will also provide additional defense in depth in the
12 sense that, if reactions start to occur within the
13 waste drum, the products, which we understand being
14 a part of what led to the runaway, will be vented to
15 the vent, and so we will be protecting the waste by
16 having the addition of the vent. So those are
17 ongoing measures.

18 And, lastly, I think there was a question
19 about the fire blankets. And we will be acquiring
20 these fire blankets. What they are is effectively
21 radiative reflectors. And these radiative
22 reflectors will help to ensure that the radiant heat
23 from any kind of a -- generated from any kind of a
24 wildfire does not impact the waste.

25 CHAIRMAN CONNERY: Okay. Just another

1 follow-on question about the venting of the drums,
2 the additional venting that you intend to do. I've
3 had this explained to me a number of times by my
4 staff, and you've been very generous with your time
5 as well.

6 So my question is the additional venting
7 is to prevent a runaway reaction such as we had at
8 WIPP but does not necessarily impact an insult that
9 comes from wildland fire.

10 Is that a correct statement?

11 DR. FUNK: Not entirely correct. So it is
12 correct to say that it is intended primarily to
13 prevent thermal runaway from a self-initiated event
14 as we spoke about within the first panel. However,
15 because of the addition of the supplemental vent,
16 again, it will increase the ability to manage the
17 gas that is generated from chemical reactions.

18 We realize that thermal runaway occurred
19 from increase of products that also could react with
20 the material. If that vent is in place, that will
21 mitigate those gases from reacting with the
22 material. Therefore, you would require a higher
23 temperature to actually cause runaway --
24 significantly higher temperatures. And so it
25 actually does increase the overall effectiveness of

1 the safety of the waste in storage.

2 CHAIRMAN CONNERY: Thank you.

3 So the final question on this line of
4 questioning I want to ask to Ms. Lebak, and it has
5 to do with the conversation we had earlier about the
6 non-RNS waste. You know, Dr. Regalbuto described
7 the fact that we had an inadequate understanding of
8 the risk or of the hazards at Area G because we
9 didn't have an understanding of the materials there,
10 the non-RNS waste in addition to the RNS waste.

11 Can you just describe from your point of
12 view the scenarios with the PISAs that our technical
13 staff talked about and what you have done to address
14 those. Thank you.

15 MS. LEBAK: Okay. Good evening.

16 PISA is a potential inadequacy of the
17 safety documentation. And so we do have some PISAs
18 outstanding at Area G. We have determined that it's
19 more important to work on the remediated nitrate
20 salt drums first, and then we will attack the
21 remaining PISAs.

22 So PISAs typically come about when you
23 find out something new that you hadn't analyzed
24 previously. And so with the WIPP Accident and
25 Investigation Board Report of 2015, there was

1 information in that report that we said we may need
2 to go back and look at a few of these factors to
3 make sure our analysis is complete. So we do have
4 some of those actions open.

5 We hope to work on those as soon as we
6 progress through the remediated nitrate salts
7 because, as we heard in Panel 1, that is the
8 dominant risk profile for the area right now. So we
9 do intend to work through those analyses. And PISAs
10 are actually a good thing because it means that
11 we're cross-checking with the real world and
12 incidents at other sites and maybe incidents on our
13 site where we can go back and make sure our safety
14 envelope is complete. So we do -- we say PISAs are
15 good, and so we will address those remaining items.

16 Also, the -- some of the buried waste we
17 talked about in panel -- in the first panel -- my
18 office approved some of the documentation previously
19 for the above ground, but we said for the
20 below-ground activities we would need to approve
21 that at a later date. So we will work that with the
22 laboratory at the appropriate time.

23 And also thinking about those waste forms
24 are contingent on what our regulators at New Mexico
25 Environment Department have to say about those

1 campaigns and when we would get to those. So it's
2 kind of interrelated with our future regulatory
3 approach, and we will address the buried waste at
4 that time.

5 CHAIRMAN CONNERY: Okay. Thank you.

6 I'd like to turn it to Mr. Santos now for
7 his questions.

8 MR. SANTOS: Thank you, Madam Chair.

9 I would like to focus my series of
10 questions to the ventilation and the cooling system,
11 given the importance that they have as a set of
12 controls.

13 So my question to Mr. Hintze is can you
14 explain to the public what sort of pedigree and
15 reliability were these systems built to? For
16 example, in the term of art, we call them -- are
17 they, for example, safety class or safety
18 significant systems?

19 MR. HINTZE: Hang on one second. I seem
20 to not merit a microphone.

21 MS. LEBAK: Sorry.

22 CHAIRMAN CONNERY: Share it.

23 MS. LEBAK: We're coordinating.

24 MR. HINTZE: So let me go back and talk
25 about the supplemental cooling. That's where we're

1 heading to.

2 And, again, one of the things that we have
3 to make sure that folks understand is we were --
4 like Rick was saying there, first you have to find
5 out where you are, and then you can figure out what
6 controls to put in place. So when we started out
7 back in the 2015 time frame, we didn't -- we weren't
8 sure exactly what were the contributing factors. So
9 as Dr. Funk was talking about, we, you know,
10 realized that it was a temperature that played a big
11 issue in the thermal runaway.

12 So at that point there, then we just took
13 the controls that we felt were necessary in place
14 based on the information that we needed. In the
15 first panel we talked about the isolation plan that
16 we had. So we put that in place. And one of those
17 actions was to put the drums into the standard waste
18 boxes in the overpacks.

19 And as we did more testing, we realized
20 that the temperature was a big player. And so at
21 that point there it was -- we said, "Okay. We need
22 to go and implement supplemental cooling so we can
23 reduce the temperature." Just like stated earlier,
24 it's not a big issue in the domes in the wintertime
25 because the temperature outside just keeps it almost

1 at, you know, 35 degrees. So what we did is we
2 implemented the supplemental cooling, but it's not a
3 safety class system.

4 And so, you know, it was what were those
5 actions that we needed to take and place to address
6 the issue because at the time, based on the science,
7 we did not have all the answers for, you know,
8 exactly what temperature the thermal runaway may
9 occur. We didn't know exactly what were the causes,
10 what were the mixture in the drums. So we took the
11 most appropriate action at the time based on the
12 information we had.

13 So the systems that we have in place out
14 there are not safety class systems, are not safety
15 significant systems. So as we go forward with the
16 science and then with the controls we have in place,
17 we're now looking, as we go forward, to additional
18 controls that may require us to put safety class or
19 safety significant controls in place. But right now
20 those are not what we have out there.

21 MR. SANTOS: Thank you.

22 Dr. Funk, if cooling were to be lost,
23 let's say, during the summertime, how much time can
24 it remain in that condition before we have a
25 problem.

1 DR. FUNK: So I don't know that we would
2 ever have a problem given the current situation of
3 the waste. And there's a couple reasons why I would
4 say that. There -- the waste has experienced some
5 temperatures. And, again, the passage of time has
6 decreased the overall chemical reactivity that we
7 have observed in the drums.

8 In addition, we have done a number of
9 tests. As part of our preparations for processing
10 these materials, we were looking -- we are looking
11 at temperature as a control to help ensure that the
12 chemical reactivity is reduced. In support of those
13 activities, we conducted some tests with full-scale
14 drums in which we used surrogate materials to
15 evaluate how long it takes for the time -- the
16 temperature to be moved if it were to be placed in a
17 refrigerator or a freezer.

18 And it turns out that the waste has a
19 significant amount of heat capacity, its ability to
20 absorb heat; and the thermal conductivity, how fast
21 it can transfer, is relatively small. And so as a
22 result, it takes a significant amount of time to
23 change the temperature of the waste. In fact,
24 placing it in a freezer, it takes on the order of
25 seven to ten days just to move a drum to the final

1 temperature.

2 So if you were to lose cooling, to raise
3 the temperature significantly would take a
4 significant amount of time, and there would be an
5 ability to have the -- say, if we lost cooling for
6 whatever reason, if we needed components, we would
7 be able to replace them in a timely manner such that
8 it would not impact the waste.

9 MR. SANTOS: Thank you.

10 For these what I call "abnormal
11 conditions" like, you know, loss of cooling or
12 ventilation, has LANL developed, validated, and
13 practiced some of the procedures that will direct
14 the workforce on what actions to take?

15 DR. FUNK: So we have, as part of the
16 supplemental documents for our safety basis -- so
17 the evaluation of the safety of the situation. We
18 are including what we call our typical conduct of
19 engineering and conduct of maintenance programs.
20 And, effectively, those programs are the programs we
21 utilize to ensure the reliability of the systems.
22 And while those are administrative controls, having
23 the appropriate materials on hand and procedures in
24 place are a piece of those particular programs. And
25 so we will be using the typical programs for those

1 activities to ensure that workers are ready and able
2 to repair if we need to.

3 MR. SANTOS: And you mentioned it takes
4 some time before temperatures start to change. But
5 do you have stockpile? And identify what I consider
6 are critical spare parts for some of these systems.

7 DR. FUNK: Yeah. So, again, that goes
8 back to the whole conduct of maintenance, conduct of
9 engineering. And the aspect is to identify the
10 critical components and then have those critical
11 components on hand to ensure that we will have
12 reliability if a component were to fail and realize
13 that, while we don't really have full redundancy for
14 the cooling system, it really consists of three
15 independent HVAC systems that provide the cooling to
16 the Perma-Con and then a fourth system which is the
17 supplemental cooling that actually cools the air
18 further. So if you lose one or two, say, of these
19 pieces, we still have additional cooling that will
20 help to mitigate that.

21 MR. SANTOS: Thank you.

22 Mr. Hintze, could you describe what sort
23 of radiation monitoring is currently present and
24 what type of response times one could expect if one
25 of those monitors is alarmed or alerted.

1 MR. HINTZE: All right. We have the CAM
2 monitors that are out there that does -- the
3 airborne radiation that is detected. So by the
4 procedure -- I can't tell you exactly what -- the
5 amount of time. I'll have to defer that to
6 Dr. Funk, but we practice those -- as a matter of
7 fact, we just ran a drill last week for the response
8 for a CAM alarm. And so it's the airborne radiation
9 detector, and we have the procedure in place for
10 that. So I don't know exactly what the time is, but
11 I can find out what that is supposed to be.

12 MR. SANTOS: How many monitors do you
13 have?

14 MR. HINTZE: I'm not familiar with exactly
15 how many we have out there.

16 MR. SANTOS: If you could get back to --
17 for the record I'd appreciate it.

18 MR. HINTZE: I will.

19 MR. SANTOS: Thank you.

20 No more questions, Madam Chair.

21 CHAIRMAN CONNERY: So I'd like to turn to
22 Mr. Hamilton now.

23 MR. HAMILTON: Thank you, Madam Chairman.

24 Ms. Lebak, a few minutes ago you were
25 talking with the Chairman about potential

1 inadequacies of the safety analysis -- PISAs. And
2 what I think I heard you say was that you haven't
3 had the time or resources to complete those because
4 you've been working on more urgent things first. I
5 understand sometimes the urgent gets in the way of
6 the important. In my view, answering these PISAs is
7 important.

8 I'd like to give -- to hear a little bit
9 more about your stacking of the priorities of
10 getting these PISAs done, completed, to make sure I
11 understand how you're managing the urgent and
12 important tasks that you're challenged with, if
13 that helps.

14 MS. LEBAK: Yes. So the remediated
15 nitrate salts are one of the site's main priorities.
16 So working through the Phase 1 and Phase 2
17 activities that were discussed earlier are very
18 important. Behind those activities I think we will
19 see deliverables from the lab on what we -- on three
20 of the PISAs shortly after the remediated nitrate
21 salt activities begin. So probably on an order of
22 six to eight weeks.

23 MR. HAMILTON: Okay. Mr. Kacich, I know
24 from your background that you have a lot of
25 experience in root cause analysis. Can you tell

1 me -- have you determined or what your view of the
2 root cause analysis that's occurred for these safety
3 basis deficiencies that are reflected in the PISAs
4 and what corrective actions you're planning to
5 improve the performance in this area.

6 MR. KACICH: One of the challenges that I
7 think we faced here is the fact that we're talking
8 about a facility that's not exactly new. And
9 when many of the initial conditions and parameters
10 were put in place, we now have new information that
11 has been brought to light. And so I think that's --
12 that's one of the contributors as to why we're in
13 the circumstances that we are.

14 If you'll allow me, I think it might be
15 helpful to -- just to put into context a little bit
16 about Area G. If you looked at the material at risk
17 that was present there in 2007 and compare it to
18 today, about 75 percent of it is gone. So in the
19 spirit of risk reduction and managing risk at the
20 highest level, I think that's an important
21 consideration.

22 Equally I think -- or maybe not equally
23 significant, but significant is the fact that we
24 have curtailed activities significantly in Area G
25 with recognition of the fact that we have some work

1 to do to get it back up to snuff and to be operating
2 compliantly within our safety envelope. I have to
3 admit that I haven't personally delved into the
4 specifics as to how we got into there, but I will
5 certainly look into it.

6 MS. LEBAK: Mr. Hamilton, if I may, when
7 the lab finds that they are in a PISA situation, the
8 first action they are required to take is to put the
9 facility or activity in a safe and stable situation.
10 And so they have to take whatever actions necessary,
11 based on their knowledge at that time, to put the
12 operation in a safe situation. And then they notify
13 the Department of Energy. Then they perform their
14 unreviewed safety question review. And then at such
15 time, they submit an evaluation of the safety of the
16 situation.

17 So back to your question on the number of
18 PISAs, my response stands that six to eight weeks we
19 plan to see probably three of the PISAs at least at
20 the ESS status, Evaluation of the Safety of the
21 Situation. But the lab would have taken actions to
22 put the facility in a safe situation. So I'm just
23 making a point that it shouldn't be an unsafe
24 situation lingering out there.

25 MR. HAMILTON: That's helpful. Are you

1 saying six to eight weeks from now?

2 MS. LEBAK: Yes.

3 MR. HAMILTON: Okay. Thank you.

4 No further questions, Madam Chairman.

5 CHAIRMAN CONNERY: Thank you.

6 Mr. Sullivan?

7 MR. SULLIVAN: Thank you.

8 And thank you to all the panelists for
9 being here. Good to see all of you again.

10 And I think it's happy anniversary to
11 Mr. Hintze; is that right? Did I hear that right
12 earlier today?

13 MR. HINTZE: One year birthday.

14 MR. SULLIVAN: One year ago today you
15 assumed greater responsibilities here?

16 MR. HINTZE: Actually, no. I've only been
17 here five months.

18 MR. SULLIVAN: You've only be here five
19 months?

20 MR. HINTZE: That's correct.

21 MR. SULLIVAN: Oh. So what happened a
22 year ago?

23 MR. HINTZE: Actually, we had an acting
24 manager until --

25 MR. SULLIVAN: Okay.

1 MR. HINTZE: -- the end of September.

2 MR. SULLIVAN: So the office --

3 MR. HINTZE: The office has been there for
4 a year.

5 MR. SULLIVAN: Okay.

6 MR. HINTZE: That's correct.

7 MR. SULLIVAN: Very good.

8 I'd like to ask -- I'd like to go back to
9 the subject of emergency preparedness. And I'd like
10 to ask Mr. Kacich.

11 So we've heard all about why the chemistry
12 says less likely to have a runaway exothermic
13 reaction today than, say, back when the waste was
14 generated and then all these other measures, which
15 we've gone over many times, to provide defense in
16 depth. Nevertheless, we create emergency response
17 plans for these sort of things. That's what
18 emergency response plans are. They still assume the
19 worst happens.

20 The Board sent a letter in January to
21 Secretary of Energy, noting that the emergency
22 response plan for an accident here at Area G still
23 had not been updated for the potential problem here
24 at Area G. Has that been fixed now?

25 MR. KACICH: Well, the area of

1 attentiveness to improvement in our emergency
2 preparedness program is a very significant
3 undertaking, which I'd like to get to; but in the
4 meantime, can I ask Dr. Funk if he's aware of the
5 specific answer.

6 DR. FUNK: Yeah. So I can address the
7 specifics for the single drum accident.

8 So the emergency planning hazard analysis
9 has been completed for the single drum accident.
10 And in that case what is done is that the highest
11 MAR, the highest material at risk drum, is evaluated
12 both for mitigated -- unmitigated and mitigated
13 consequence to see what the potential release would
14 do for both work or public.

15 In the case of the highest MAR drum, which
16 effectively constitutes 40 PE curies -- plutonium
17 equivalent curies -- when in the mitigated case, the
18 evacuation distance is determined to be 30 meters
19 and the shelter-in-place distance has been evaluated
20 as being 270 meters. And, of course, the
21 unmitigated would be much higher than that, but we
22 currently have the drums stored in the mitigated
23 configuration.

24 MR. SULLIVAN: Okay. So, again, we're all
25 on the hypothetical here.

1 DR. FUNK: Yeah.

2 MR. SULLIVAN: You've given us all these
3 reasons why we don't expect this to happen. So I
4 don't want to alarm anybody sitting in the audience.

5 But suppose hypothetically tomorrow we
6 actually did have an exothermic -- runaway
7 exothermic reaction. Who would do what? Once --
8 tell me. How do we detect it, and then who
9 responds? Can you just walk us through that?

10 DR. FUNK: Yeah. So the first part would
11 be detected through the CAMs. And so there are a
12 number of CAMs, as we were discussing a little bit
13 earlier. We do have what are called eCAMs. ECAMs
14 have cellular connective capability, and they are
15 provided to be in contact with our air monitoring
16 individuals. So that would be the first response
17 because the eCAMs are actually located within the
18 Perma-Con.

19 Once an eCAM were to be activated, the
20 folks that have the responsibility to evaluate what
21 they observe when they get that notification would
22 make a determination. They actually get a spectrum
23 of what is the material that was released and they
24 can actually determine roughly the magnitude of the
25 release. They would then make the call as to

1 whether or not the Emergency Operations Center would
2 need to be set up to provide any kind of additional
3 information to our local communities; and, depending
4 on what they learned, they would then move forward
5 with the activation of that EOC.

6 We would also have a continual air
7 monitoring. There are AIRNET stations all around
8 the surrounding area. So there would be additional
9 information that we would be provided that would be
10 fed back into the EOC so any other additional
11 actions could be taken.

12 MR. SULLIVAN: Okay. But other than
13 evacuation, there isn't any other specific type of
14 thing anybody could go do to try to stop this
15 reaction if it was, in fact, in progress; is that
16 correct?

17 DR. FUNK: So currently we're in a little
18 bit of an awkward situation from that regard. So
19 what I mean by that is -- as you heard
20 Dr. Regalbuto, she discussed the status of the waste
21 being in what are called standard waste boxes.
22 Those standard waste boxes that she indicated have
23 been sealed quite well. And so one of the first
24 steps for us right now is to take the lids off the
25 standard waste box.

1 So if there were an ongoing reaction
2 today, it's very difficult for us to do anything in
3 the way of adding cooling material or any kind of
4 compensatory measure to sort of mitigate chemical
5 reaction. Once the lid is off the waste box, we
6 will actually have a couple of advantages. We will
7 have the ability to measure the temperature directly
8 of the drum, which will be our first sign as to
9 whether or not there are any additional reactions
10 taking place.

11 If we were to observe any additional
12 reactions, then we would be putting together plans
13 for how to add ice water, dry ice -- something of
14 that nature -- to try to add quick cooling to the
15 drum to try to prevent the accident. And we haven't
16 finalized those plans. They are currently in
17 progress.

18 MR. SULLIVAN: Thank you.

19 So, Mr. Kacich, the -- another thing we
20 pointed out in our letter to the Secretary back on
21 January 7 was that there was no facility drill
22 program at Area G. Has that been corrected?

23 MR. KACICH: Yes. As a matter of fact, we
24 have conducted a couple of drills at Area G earlier
25 this month. And I would put it in the category of

1 we've had an improvement initiative underway for
2 some time. And with the benefit of the recognition
3 of the importance of the activities in Area G that's
4 now underway, we're turning our attention to it a
5 little more deeply, and we have a program for
6 exercising that significantly over the upcoming
7 months.

8 And to give you a little bit in the way of
9 statistics about that, we typically run on the order
10 of five drills or exercises a month. And I did a
11 little checking back over the last 30 months. We've
12 done over 100 of them.

13 And to your point about being prepared for
14 everything that you try desperately to never have
15 occur, among the types of incidents that we practice
16 include contamination events, criticality, fires,
17 explosions, medical emergencies, hazmat emergencies,
18 tritium release, biological release, seismic events,
19 loss of power, among others. And so it's a big
20 laboratory with a lot of hazards. We recognize that
21 we need to make sure that safety is prominent in
22 terms of taking care of the workforce, as
23 Dr. Regalbuto talked about on the first panel.

24 And in connection with executing all of
25 those, it was just about a year ago we put in place

1 an improvement initiative. And of the 67 actions
2 that we set out for ourselves, 61 of them are
3 completed. Now, we have to demonstrate that there's
4 good intent -- that good intent is going to
5 materialize as we do these drills and exercises.
6 But in the aggregate, I believe they provide
7 confidence that, when you couple that experience
8 base and you look at the facility that we have,
9 which I believe is excellent, along with the other
10 capabilities -- hardware and so forth that we have,
11 and the experience, unfortunately, of having to deal
12 with two very significant events -- we're well
13 positioned to attend to this responsibility in the
14 event of some -- of site condition.

15 MR. SULLIVAN: Just to be clear, you
16 talked about 100 drills, but that wasn't 100 drills
17 at Area G, was it?

18 MR. KACICH: Correct, it was not.

19 MR. SULLIVAN: Okay.

20 MR. KACICH: But across the laboratory.

21 MR. SULLIVAN: I understand.

22 MR. KACICH: But we have a campaign
23 specifically for Area G that's now been mapped out
24 for the upcoming months.

25 MR. SULLIVAN: Okay. So it's been mapped

1 out. And --

2 MR. KACICH: And we started earlier this
3 month. Yes, sir.

4 MR. SULLIVAN: I look forward to coming
5 back, then, and seeing how it gets executed.

6 So, Ms. Lebak, would you address from your
7 oversight perspective? I think you have oversight
8 over the emergency preparedness -- is that
9 correct? -- not Mr. Hintze?

10 MS. LEBAK: We have the site-wide program.
11 So I would echo some of the points that Rick brought
12 up. I mean, there is a site-wide program. We do
13 emergency plans. We have a state-of-the-art
14 Emergency Operations Center that's fully
15 operational, and we do a whole myriad of drills each
16 year, also a site-wide graded exercise each year.

17 We've also been working on some of our
18 readiness activities in nuclear facilities and so,
19 as we proceed through our readiness process, we have
20 the ability to demonstrate operational drills. And
21 so we have seen progress in TA-55 in our tritium
22 facility; and as you can imagine, before we would be
23 able to ship to WIPP, we have readiness activities
24 that we would go through in Area G as well.

25 So I think -- the site has a program.

1 It's exercised regularly. We deal with Los Alamos
2 County. We deal with some of the local federal
3 agencies at a site-wide level. And we have actually
4 lotted the laboratory for a couple of the major
5 drills that they've done in the last two years at
6 the site exercise level.

7 So I think we have a lot of elements in
8 place; but your letter to us in January is certainly
9 correct, and we can improve our program. We're
10 committed to improving our program, and we can
11 improve in Area G as well. But, I mean, this
12 panel -- we live in Santa Fe and Los Alamos County.
13 So we want to be good neighbors. We want to
14 interface effectively with the towns and the people
15 in the community. And we intend to do that, and we
16 will improve.

17 MR. SULLIVAN: Okay. Go ahead,
18 Mr. Hintze.

19 MR. HINTZE: If you'll allow me to answer
20 that, my organization is responsible for line
21 management of Area G. So that includes the
22 operational drill. So the operational drills fall
23 under me.

24 You asked the question what's the degree
25 of confidence based on the oversight that we have

1 for the program. And I will tell you right now it's
2 adequate but it's not at the level it needs to be.

3 Just like Rick said, we've put things in
4 place. We've made process improvement teams. We've
5 improved the procedures. We've run some of the
6 drills. I wouldn't classify that a lot of drills.
7 You know, might be a little bit more simplistic at
8 this time. At this stage we're kind of walking.
9 We're not at the running stage. So we are making
10 the changes that need to be in place. We're
11 practicing and putting everything in place, but it
12 needs to improve at this time.

13 MR. SULLIVAN: Okay. Well, then -- just,
14 then, for the record, can you take it for the record
15 and get back to us on when we will be running at
16 Area G?

17 MR. HINTZE: Are you talking about
18 from our -- and what I would classify as running
19 versus walking? Yeah, I'll get back to you.

20 MR. SULLIVAN: Well, so for the benefit of
21 the public, I mean, I've heard a lot of stuff about
22 how good this site-wide emergency preparedness is.
23 But, you know, if the individuals at Area G -- I
24 think I heard Dr. Funk say that we have these CAMs.
25 We have these eCAMs. They're going to tell the

1 operator there, if they've got a runaway reaction,
2 enough information to assess and then maybe get the
3 Emergency Operations Center manned.

4 So if the person at Area G doesn't do the
5 right thing, it doesn't matter, in my view -- I
6 don't think it matters how good everybody else is
7 because everybody else doesn't get notified if the
8 person at Area G -- so that's why I'm focusing so
9 much on what is the drill program at Area G.

10 So if you would just, you know, get back
11 to us for the record and then tell us when -- as you
12 said, when we will be running.

13 MR. HINTZE: Will do.

14 MR. SULLIVAN: Thank you.

15 Thank you, Madam Chair.

16 CHAIRMAN CONNERY: Thank you,
17 Mr. Sullivan.

18 So I'm going to shift the line of
19 questioning to the treatment of the remediated
20 nitrate salt waste. And so my questions are going
21 to primarily focus on Mr. Hintze, as Ms. Lebak just
22 noticed.

23 So the question I have is -- my
24 understanding is the Bridging Contract requires LANL
25 to commence treatment for the remediated nitrate

1 salt waste no later than February 16, 2017.

2 Can you just describe the current
3 treatment strategy and the primary hazard and
4 controls during this treatment.

5 MR. HINTZE: Sure. And I'll start from
6 the contract perspective. And for our scope as the
7 Environmental Management Program, the treatment of
8 the nitrate salts is the number one priority that we
9 have. Again, I'm looking at just from the scope
10 that is under the Environmental Management Program
11 as opposed to the entire site program.

12 So in our contract two-year -- it's a
13 one-year with two six-month options. And as you
14 state, treatment of the nitrate salts is in February
15 of '17 such that it would be finished before the end
16 of the contract period at the end of the fiscal
17 year.

18 At the time that contract was put in
19 place, it was based on what we knew about the
20 science and as far as what we would have to do to
21 treat the nitrate salts and so forth. At this point
22 in time, we're trying to accelerate that, and yet we
23 have to do it in a safe manner. So as you heard
24 earlier in the first panel and then earlier in this
25 panel, the first thing that we want to do is

1 increase the margin of safety, which is why we're
2 going to be implementing the supplemental vents. At
3 that point, then we'll turn our attention to the
4 treatment of the nitrate salts.

5 Right now we're looking at -- through the
6 science, through what are the engineering analyses,
7 through the facilities. Currently the treatment
8 would be to -- first we'll open up the standard
9 waste boxes, or the overpacks. We'll go and put the
10 vents in. And then the actual treatment -- we'll
11 take the drums, take them in the facility to open
12 them up, and then we'll add the material that -- an
13 inert material that would then reduce or eliminate
14 the hazard associated with the drums.

15 The timing on that right -- as of right
16 now, we're in the midst of integrating that with our
17 schedule for the supplemental vents. So, again, our
18 timing is still in that February time frame. We're
19 hoping to pull it forward, but it's -- from a
20 simplistic perspective, it's open up the drums; it's
21 to place an inert material in there with the nitrate
22 salts and then to repackage the drum such that they
23 can be shipped to WIPP when WIPP opens up.

24 CHAIRMAN CONNERY: And so from a facility
25 worker standpoint, what are the hazards associated

1 with doing that type of remediation? And I guess
2 the other question I would have is what facilities
3 are you looking at to use? And I know that we
4 talked about WCRR. There are some challenges with
5 that facility. It might have to be upgraded in
6 order to be able to deal with it, but I know that
7 there are other options on the table.

8 So could you just kind of give us a pros
9 and cons of where you were thinking of doing this
10 and then what hazards would be introduced to the
11 workers and what controls you'd put in place to
12 protect them.

13 MR. HINTZE: Sure. We formed a team that
14 went through the engineering analysis of all the
15 facilities that we could potentially use. One of
16 the facilities is the WCRR facility that you
17 mentioned, which is a Category 2 facility, even
18 though it may need some physical upgrades.

19 We also looked at some temporary-type
20 mobile facilities that have been used throughout the
21 complex -- one of them down at Savannah River Site,
22 another one that was at the -- that is actually at
23 the site. We talked about putting those potentially
24 down in Area G such that actually where the drums
25 are we could take them out and try to do the

1 treatment in those areas. We went through a whole
2 vast array of the different engineering analysis,
3 and our -- the result of that engineering analysis
4 is to use that Category 2 facility, the WCRR
5 facility.

6 We then went and asked -- formed a team of
7 academia, private industry, and other labs to look
8 at our engineering analysis to make sure that what
9 we were looking at was the right thing -- the
10 hazards to the workers; the hazards, for example, of
11 transporting the drums because the WCRR facility is
12 not in Area G. So we looked at all the different
13 aspects that would be potential impacts to the
14 workers, potential risks as far as should something
15 happen in the transport and so forth like that.

16 That report by that team -- we just
17 received a draft report, and it should be out in the
18 next couple weeks. But it's -- we believe it's
19 going to confirm that the WCRR facility is the best
20 facility that we have in order for us to -- because
21 the other aspect is timing. When you look at the
22 risk over time, many of these other options mean
23 that we would either have to construct some sort of
24 facility or go through the process of placing it,
25 getting the -- all of the technical support and the

1 hookups of ventilation and so forth. And so because
2 we have that facility there, because that facility
3 is made for the nuclear operations, we're heading
4 toward the WCRR facility in order to reduce that
5 risk, eliminate that hazard as soon as possible.

6 CHAIRMAN CONNERY: Okay. So my final
7 question -- and it's probably to you, Kim -- you can
8 share if you want to -- is with regard to the safety
9 basis vulnerabilities at WCRR. I mean, I think
10 that's, from our standpoint, something that we're
11 very concerned about and not sure how you would
12 address those vulnerabilities.

13 MS. LEBAK: Right now WCRR is in cold
14 standby, and there's no material in the building.
15 So we have an opportunity to look at WCRR and look
16 at the proposed operation, look at our existing
17 safety basis, and see what we have. But we need to
18 seek the approval of New Mexico Environment
19 Department before we get to the remediation step.

20 So right now I think the lab's been
21 looking into it, as Doug has alluded and Dr. Funk
22 earlier. So there's a lot of preliminary
23 information, but we still have to look at the
24 proposed activity and look at our safety basis and
25 update it if we need to. So we will have to go

1 through that step.

2 CHAIRMAN CONNERY: (Indicating.)

3 MR. HINTZE: And let me just add, from a
4 schedule perspective, when we're looking at the
5 facility and the possible upgrades, all of that is
6 being incorporated into the project schedule. And
7 that still fits within that time frame that we have
8 to get the salts treated before the end of next
9 year.

10 CHAIRMAN CONNERY: Okay. Thank you. I
11 appreciate that.

12 Doctor -- Mr. Hamilton.

13 MR. HAMILTON: Thank you, Madam Chairman.

14 I'd like to go back to a question I talked
15 about earlier, which is the root cause of the
16 original release at WIPP. And this is really going
17 to be addressed to the two field office
18 representatives, but let me set the table a little
19 bit.

20 The Accident Investigation Board
21 identified a number of weaknesses. And I don't need
22 to -- I've got a list here, but you know what they
23 are, I'm sure, as well probably by memory.
24 Generally, they were weaknesses in resolving
25 unreviewed safety question process, the safety

1 culture, oversight, and oversight of the transuranic
2 waste activities.

3 Ms. Lebak, can you tell me what actions
4 your office has taken to improve the oversight
5 process in the wake of the Accident Investigation
6 Board's identification of these issues?

7 MS. LEBAK: Yes, sir.

8 We received the DOE Accident Investigation
9 Board report in April of '15. And since that time
10 we -- my office received several of the Judgments of
11 Need. And as you know, there's a table in the
12 document, and you can see if they were field office
13 related, headquarters related, what have you. So we
14 have developed corrective actions for the Judgments
15 of Needs that were identified in the report. Doug
16 can address his activities subsequently.

17 But we're at 30 percent through our
18 corrective actions at this point. But we submitted
19 our corrective action report probably in August or
20 September of 2015 so -- with the Accident
21 Investigation Board order coming out in April. And
22 then we sat down and did an analysis of what we
23 could do in corrective action space. We've really
24 been working on it for several months.

25 So one of the things called out in the

1 report was the focus of our oversight and our
2 staffing levels. And the report identified some
3 areas where we had had attrition and had not
4 backfilled some of the positions. One of the
5 positions was a senior technical safety adviser, and
6 then most prominently the report called out facility
7 reps. So those are federal people who actually work
8 in the facilities day in, day out. They're our eyes
9 and ears in the actual nuclear facility or a
10 high-hazard facility.

11 So since -- we also had other Judgments of
12 Need, but your question pertains to oversight. So I
13 looked at my oversight. I looked at my staffing.
14 I've developed a staffing plan, and I submitted that
15 to our headquarters. I did request additional
16 people for our office. However, I didn't -- I
17 haven't been waiting to see if I receive additional
18 staff. I've talked to my fellow site managers at
19 the other sites. I've had people in on detail, and
20 I've been able to have people come in on rotations.
21 And then NNSA has an intern-like program where we've
22 also been able to get some people in our office.

23 So I have done a staffing analysis. I
24 have requested additional FTEs. But in the
25 meanwhile, I didn't wait. Last year I had people

1 in. I have different people in this year on detail
2 as well.

3 So we also do a risk-based approach to
4 oversight. And as we have talked about previously,
5 the WCRR and RANT facilities are in cold standby.
6 So right now those facilities are not requiring a
7 lot of oversight and obviously not a day-to-day
8 presence in those facilities.

9 So we basically have our facility reps in
10 some of the other nuclear activities on site like
11 the plutonium facility, the tritium facility. We
12 have a presence at Area G as well. As we have
13 talked about earlier, we are still shipping
14 low-level waste from Area G. There are activities
15 going on with the drums that we have there. And so
16 we are continuing to do oversight, and we are
17 working on our corrective actions.

18 Another activity that we identified to do
19 was an unreviewed safety question assessment of the
20 laboratory. So that's being conducted right now.
21 We brought in people from Albuquerque to assist us
22 in that review. So that's another item that we're
23 doing right now.

24 Another key item was training. So we've
25 gone back and retrained some of the feds on the --

1 our code of federal regulations, some of our safety
2 orders. And we have another set of training
3 activities to do with our staff, and it's going to
4 get more into the environmental area.

5 So I think we are moving forward on our
6 corrective actions. We will continue to work our
7 corrective actions. And we are continuing to
8 provide oversight at the site.

9 MR. HAMILTON: Mr. Hintze, let me ask you
10 the same question. But before you answer it, just
11 for the general information of the public, I want to
12 recognize that we recognize that your office didn't
13 exist at the time of the release. And so my
14 question, then, is what kind of lessons learned are
15 you incorporating into your new office as you move
16 ahead?

17 MR. HINTZE: Right. Well, first off, as a
18 result of the Accident Investigation Board, there
19 were five corrective action plans that were
20 written -- one by the contractor at WIPP, one by the
21 federal organization, one by headquarters, and then
22 there was one by the Los Alamos contractor, and then
23 there's actually a joint corrective action plan by
24 my organization and Kim's together. So even though
25 we didn't exist at the time, we have corrective

1 actions to do as a result.

2 So the things that we have to do is
3 two-fold. First is what about the corrective
4 actions that came out of the LANS, the contractor
5 corrective action plan. So we're in the midst of
6 overseeing implementation of that. Some of the
7 things that they've done from corrective action are
8 a change in the organizational structure, putting in
9 a waste processing division; changing out the
10 management teams; changing the procedure because one
11 of the issues of corrective action was the
12 configuration control. We heard about the procedure
13 that talked about a -- you know, the inorganic
14 versus the organic and how it was a quality
15 assurance type of issue. So configuration control.

16 All of those procedures, all of the
17 organizations in place -- both Kim and I are
18 responsible for making sure that those corrective
19 actions by the contractor are being put in place
20 and, even more importantly, that they're effective
21 as they're being put in place. So that's our
22 responsibility as far as overseeing the corrective
23 actions of the contractor.

24 For us one of the big things is -- just
25 like you were talking about -- is formation of the

1 new organization. The individuals that were
2 overseeing the Environmental Management scope moved
3 over to my organization. So we had to establish
4 everything from setting up the procedures to
5 defining the roles and responsibilities between Kim
6 and I as far as the split between us and them. And
7 then I have to build my organization. Right now I
8 have authorization -- or I had authorization for 26
9 with 21 people here. Just recently we got
10 authorization to increase that to 41 individuals.

11 So even though I don't have the people
12 here, we have filled the resources that we needed in
13 different ways. One is through details from other
14 sites where people have the subject matter
15 expertise. Relying on Kim's organization -- as
16 we've talked earlier, Kim is still responsible for
17 the safety basis. But when I actually staff up my
18 organization, when we -- when it is time, we will
19 move over and have responsibility for the safety
20 basis. So we're in the midst of hiring those extra
21 people.

22 In the meantime, we're also going back to
23 subject matter experts from headquarters. We have a
24 lot of support from both NNSA and EM for sending
25 folks down to help us from the subject matter expert

1 perspective. And then we actually have staff
2 augmentation from a contractor. So that's how we're
3 filling up the shortfall in the resources.

4 The other issue that really came out in
5 the corrective action was the need for training.
6 And so because it's a joint corrective action plan
7 between Kim's organization and mine, we're doing a
8 lot of the training together on integrated safety
9 management system, on the safety basis, and so
10 forth. So we're completing the training, and we're
11 staffing up so that we can fill our oversight
12 responsibilities.

13 MR. HAMILTON: Thank you both.

14 And I'll just close this set of questions
15 by saying that I recognize what you were saying
16 earlier, Ms. Lebak, about the urgency of putting the
17 facility in a safe condition and then working on
18 these important issues, which are the core issues to
19 prevent a recurrence. And it sounds to me like,
20 from the two answers I just got here, that you
21 recognize that. So I appreciate that.

22 And I will -- I have no more questions,
23 Madam Chairman.

24 CHAIRMAN CONNERY: Thank you.

25 Mr. Sullivan?

1 MR. SULLIVAN: Thank you, Madam Chairman.

2 Same theme -- corrective actions for the
3 accident investigation report, but I'm going to
4 shift my focus away from the federal government
5 oversight to the laboratory.

6 Mr. Kacich, one of the comments in the
7 accident investigation report had to do with safety
8 culture, and it said that there were pockets in the
9 laboratory where there were some employees who were
10 afraid to speak up and raise issues that might stop
11 production. Safety culture can be kind of a
12 touchy-feely thing, but there were employees from
13 the WCRR facility who actually told the Accident
14 Investigation Board that they saw indicators like
15 smoke or foaming of a chemical reaction that they
16 didn't expect to see when they were mixing this
17 organic absorbent into -- with the nitrate salts
18 and -- but nobody said anything.

19 Has that problem been fixed?

20 MR. KACICH: I won't say that it's a --
21 it's a fixed or unfixed. It's -- I don't consider
22 it to be a binary type of situation. It's a case
23 where our performance is on a continuum and we're
24 set about to improve it.

25 Similar to one of the questions that

1 Commissioner Hamilton raised earlier about -- or the
2 implication of one of his question about the health
3 of our Contractor Assurance Program and corrective
4 actions in general, the first thing we need is a
5 workforce that understands that the only issue we
6 can't solve is the one we don't know about. And so
7 an environment where people are not just -- it's not
8 just okay but it's recognized that it's part of your
9 day-to-day responsibility that, if something isn't
10 right, to speak up, that's foundational to be able
11 to get those problems identified and fixed, and
12 fixed in a lasting manner.

13 One of the initiatives that we have
14 underway is through our Worker --

15 Help me with the term.

16 DR. FUNK: Safety and Security.

17 MR. KACICH: -- our Worker Safety and
18 Security Team.

19 Thank you.

20 And it is there that we mobilize groups of
21 employees at the worker level, supported by
22 management, and the entire foundation of that
23 campaign is to have them come forward and say what
24 is it that isn't working for you about your
25 particular work environment so we can get it on the

1 table and get it resolved.

2 At recurring meetings we have senior
3 leadership come in and talk about what their various
4 organizations have done in that regard in the spirit
5 of creating a little peer pressure and also sharing
6 success stories; so that is becoming increasingly
7 part of the culture. So the fact that -- how you
8 started this question indicates that we have need
9 for improvement, but I believe that we have the
10 right management focus and worker engagement to get
11 that back on the right track.

12 MR. SULLIVAN: Okay. And can you briefly
13 tell us, you know, from the senior level on down,
14 Dr. McMillan on down, what is your personal
15 engagement in this sort of thing so I -- do you go
16 and speak to the employees at the various specific
17 facilities to try to gauge, you know, what issues
18 they're facing -- that sort of thing? Could you
19 please speak to that?

20 MR. KACICH: Surely.

21 I am actually the champion for the
22 laboratory in this regard. So I take it seriously.
23 And so I have recurring meetings with the staff of
24 people who put our program in place with recognition
25 that it has to be a laboratory-wide initiative.

1 I went to a meeting last week or the week
2 before, and I have to -- you know, in the spirit of
3 full disclosure, I was late getting to the meeting,
4 and so I managed to get there for the last half of
5 it, roughly. And I listened to an individual
6 express a considerable amount of frustration about
7 her work environment where the temperature in her
8 work space was occasionally above 90 degrees and the
9 air-conditioning system was competing with the
10 heating system, which was causing a lot of noise.
11 And it was a disturbing anecdote to take in.

12 And one of her comments in explaining this
13 to me at the meeting was that she had been
14 frustrated about getting some attention on this up
15 until that point in time and used words to the
16 effect of "I didn't know where else to go."

17 And I said, "Yes, you did. You just told
18 me. Thank you. And I really appreciate that."

19 And then I interacted with the individuals
20 in our organization who have the responsibility to
21 get that addressed. I heard back from this
22 individual within the next 48 hours that -- her
23 response was fantastic, and she was very
24 appreciative of it. And we had follow-up actions in
25 place just to make sure that it gets taken care of.

1 So in many respects, it's a small thing
2 relative to 60 RNS drums, but it's not really a
3 small thing. And every opportunity that is either
4 given to me or I can create to make it clear to the
5 workforce that we care about their well-being and
6 that we need them to identify issues so we can get
7 better is something that's on my personal agenda
8 daily.

9 MR. SULLIVAN: Thank you.

10 Would you stop in to my office in
11 Washington, D.C., next time you're there? The
12 heating and cooling doesn't work very well.

13 MR. KACICH: Yes, sir.

14 MR. SULLIVAN: It's a leased space, and we
15 don't own the building.

16 One of the other -- just quickly, though,
17 one of the other corrective actions has to do with
18 the safety basis determination. There were some
19 specific things about -- it was called a BIO at
20 WCRR, I believe, the Basis for Interim Operations --
21 different term same basic concept, but it had to do
22 with, again, the Contractor Assurance System and how
23 well there was -- how much rigor there was in that
24 process and how much internally the contract -- how
25 much the laboratory was making sure the people

1 responsible for that were doing the right things.

2 Again, can you just address some of the
3 corrective actions that have been taken there?

4 MR. KACICH: Yes, sir. Yes, sir. So
5 you're correct that our Contractor Assurance System
6 has had some identified weaknesses. When we talk
7 about that subject matter, we tend to use a
8 description of five pillars; and they are metrics,
9 assessments, issues management, process
10 improvements, and lessons learned.

11 We put in place some new leadership with
12 the -- leadership relatively new to the laboratory
13 in effect this calendar year. And it's vested in a
14 place in the organization where I have a lot of
15 confidence that we're going to start to realize some
16 of the improvements that we need to make. We have a
17 multi-year plan in recognition of the -- the
18 significance of the challenge is to realize the
19 improvements that we have ambitions to achieve over
20 the upcoming period of time that we're going to be
21 on this contract. I'll put it that way.

22 And as recently as -- within the last
23 week, the status of that program was briefed to the
24 senior team because it's, again, one of those
25 instances where it's the entire laboratory that

1 needs to own the responsibilities to effect those
2 improvements.

3 So beyond what I've already talked about,
4 the area of undertaking a causal analyses in a
5 thoughtful and meaningful way -- so with the right
6 expertise -- so that when something goes wrong we're
7 really able to get to the bottom of it and engage
8 what we call now "learning teams" so that the people
9 who are directly involved in the particular incident
10 have the opportunity to have a great hand in being
11 the architect of the solution and an increased
12 emphasis on human performance across the laboratory
13 as well. And then when we get those corrective
14 actions identified, we track them in a database
15 that -- so we don't lose anything.

16 And to the point that Mr. Hintze made
17 earlier, after there's been sufficient run time, we
18 need to undertake effectiveness reviews to make sure
19 that we've really sustained the improvements that we
20 intended with those actions. So, again, we have
21 much to do, but I believe we have the right
22 leadership in place; and, again, it's led by
23 Dr. McMillan to effect those improvements.

24 MR. SULLIVAN: Thank you very much.

25 Madam Chair.

1 CHAIRMAN CONNERY: Mr. Santos?

2 MR. SANTOS: Thank you, Madam Chair.

3 Ms. Lebak, you mentioned that some of the
4 PISAs is six to eight weeks from now. Do you expect
5 any additional controls that might need to be added
6 to handle the other non-uranous waste to deal with
7 the risk associated to the other type of waste?

8 MS. LEBAK: I'll have to -- I'll have to
9 see what the analysis says first, and then we can
10 see if there's controls that are derived from the
11 analysis. So, also, I think, as we've discussed
12 previously, we can have a control in place. It can
13 be a defense-in-depth control. It may not rise to
14 the pedigree of safety class or safety significant.
15 And so if we follow how the analysis -- the hazard
16 analysis and accident analysis -- what we see, if
17 the controls are derived, then so be it.

18 But also as the federal approval official,
19 the feds can add controls if we see fit. The lab
20 can come to us and say, "We don't think they're
21 warranted in this case," but we can add additional
22 controls as well. So we'll see -- we'll have to see
23 how that analysis shakes out.

24 MR. SANTOS: Thank you. I look forward to
25 seeing those results.

1 We are focused on the wildland fires
2 primarily. Are there any other risks that you
3 analyze and consider for all waste at Area G?

4 MS. LEBAK: We have the suite of accidents
5 in the current BIO. I mean, that can be a truck
6 colliding with, you know, a waste drum. And, as you
7 know, the waste activities are very manual
8 processes. And in some cases you may have a process
9 where you can automate it, but in this case it's a
10 very manual process. So we have several
11 administrative-type controls. And those are the
12 controls we have in place now, but we do have some
13 passive features that we rely on like in the
14 instance I just mentioned that -- if a truck veered
15 into a waste drum, we have jersey barriers that
16 would, you know, deter the truck from colliding with
17 the drums. That's just one example.

18 We can also control how many drums are in
19 what facility. And we know the contents. We know
20 the material in the drum; so we can control it by
21 that mechanism. So lots of administrative-type
22 controls we have for the accident scenarios.

23 MR. SANTOS: Thank you.

24 Different question: Once WIPP reopens,
25 it's my understanding that, in order for TRU waste

1 to be shipped, you need the RANT facility fully
2 operational; is that correct?

3 MS. LEBAK: We could do loading outside,
4 but there's temperature conditions that we would
5 have to constantly be monitoring like wind and what
6 have you. You can't load the trucks if it's very
7 high wind. It makes -- you wouldn't want to do
8 that. It wouldn't be the safest situation. So we
9 could do the mobile loading. We'll have to see --
10 you know, when that time comes we'll have to see
11 where we are.

12 We have identified some seismic upgrades.
13 We have received correspondence from you on the
14 seismic analysis of the RANT facility, and we will
15 have to make upgrades to that facility. The lab has
16 begun engineering design on the seismic upgrades.
17 It would probably be our preference to load in the
18 RANT facility, but we would have to complete those
19 facility upgrades first. But in the meanwhile, it
20 is an option to load outside in the appropriate
21 conditions.

22 MR. SANTOS: So your current schedule for
23 RANT facility -- when do you think it will be ready
24 to go?

25 MS. LEBAK: Well, we have --

1 MR. SANTOS: What year?

2 DR. FUNK: So, clearly, we have funding
3 this FY to do the engineering analysis for the
4 seismic upgrades, and we plan on implementing those
5 upgrades in fiscal year '17.

6 MR. SANTOS: And the duration of that
7 effort, roughly?

8 DR. FUNK: It's a year-long effort to do
9 the upgrades.

10 MR. SANTOS: Thank you.

11 No further questions, Madam Chairman.

12 CHAIRMAN CONNERY: So in the interest of
13 time, I'm going to truncate this last line of
14 questioning because I think Ms. Creedon addressed it
15 somewhat. And it has to do with the newly generated
16 transuranic waste and the issues with the fact that
17 you can't ship to WIPP right now. You can't accept
18 waste at Area G. There is a buildup of transuranic
19 waste. And she had mentioned, you know, the issue
20 of having more drums at PF-4, which is obviously
21 kind of contrary to our goal of MAR reduction at
22 PF-4.

23 So just along those lines to -- I'll just
24 state that we have an ongoing concern in this area,
25 and we'd like to understand better what your

1 processes are going forward with the transuranic
2 waste facility. I understand that you want to
3 accelerate that, but that's limited to a specific
4 type of waste; and you'll still have to think about
5 adding additional drums to Area G at some point once
6 the drums are remediated, the 60 -- the 60 RNS drums
7 in addition to some of the other PISAs that have to
8 be addressed.

9 So I guess the last question would be,
10 with the physical capacity for additional drums
11 being available at Area G -- but obviously that's at
12 odds with the limited life status of Area G -- have
13 you looked at temporary receipt of newly generated
14 waste for continued risk-reduction work at PF-4, for
15 instance? And I guess that's to Mr. Hintze.

16 MR. HINTZE: Sure. One of the things that
17 we have formed is a working group, and we have an
18 enduring waste strategy that we've been developing.
19 And that's in coordination with us on the
20 Environmental Management side as well as the NNSA
21 side with the contractor. When you're talking the
22 newly generated waste, that doesn't fall under the
23 scope of the Environmental Management but because
24 we're the ones that are responsible for WIPP. So
25 I'm fully involved in that there and helping to

1 prioritize when WIPP does come open.

2 So part of the enduring waste strategy --
3 the NNSA side and brought before the team -- has
4 looked at several different ways on how to address
5 the waste issue that's coming out of PF-4 or the --
6 being stored at TA-55. So one of the first things
7 was to look at it from a waste minimization
8 perspective. So significant effort has gone into
9 "How do you make sure that you're not generating
10 that waste to start with?" And so they've made
11 significant improvements when you look at what the
12 numbers would show as far as what waste has not been
13 generated that previously was, you know, put in
14 containers that would be considered -- that would go
15 to transuranic waste.

16 The second area they're looking at is
17 segregation of waste, making sure that only the
18 waste that truly is TRU goes into those containers.
19 We have Green is Clean Program, and so it's making
20 sure that we're segregating the waste appropriately
21 so that everything only goes into the TRU as it
22 should.

23 We talked about the storage in the
24 different areas, the temporary storage. I walked
25 through those different areas to make sure that I

1 understood from the EM perspective because
2 eventually, like we're talking about, it goes to the
3 WIPP. And so what are the things that we can do as
4 a coordination from the site perspective.

5 So one of the things that we just heard
6 talked about was Transuranic Waste Facility, and so
7 part of that enduring waste strategy is, once we
8 finish with the transuranic waste facility, that
9 some of the waste that would be in the TA-55 or over
10 at PF-4 would be moved into that Transuranic Waste
11 Facility. So we have to do some efforts there as
12 far as what waste can be stored there and for how
13 long. But then that will free up more of the space
14 that's in TA-55 and in PF-4.

15 From an EM perspective, Area G is a
16 closure location. And so once we get our hand on
17 the nitrate salts and treat those salts and then we
18 address the -- when we talked about the other
19 pieces -- we get a handle on that, then it will be a
20 coordinated effort on how does it integrate with the
21 shipping schedule for WIPP because we'll start to
22 ship off, at some limited rate, the material to
23 WIPP.

24 And then the last thing is, like you were
25 saying, is looking at if there is a need or a

1 potential that we could -- once we get the handle on
2 all the rest of the PISAs and so forth, that there
3 would be potential to move some of the waste into
4 Area G. But, again, right now that's not on board
5 until we go through all of the other PISAs and we
6 address the nitrate salts.

7 CHAIRMAN CONNERY: So can I recap that to
8 say that you're looking at this from an entire
9 Los Alamos point of view, how to deal with this
10 waste and what goes where when and flexibility in
11 that area?

12 MR. HINTZE: Exactly.

13 CHAIRMAN CONNERY: Okay. Thank you.

14 Can I just ask my other Board Members if
15 they have any additional questions for the panel.

16 MR. SANTOS: No, Madam Chair.

17 CHAIRMAN CONNERY: All right. Well, I
18 appreciate you taking the time to come and speak
19 with us today and for the information that you've
20 presented to us. And, again, thank you, and you are
21 free to go.

22 So at this time in the hearing is our
23 public comment time -- sorry -- our public comment
24 time. First, I would like to recognize some of the
25 folks in attendance here today. Secretary Ryan

1 Flynn from the NM Department of Environment and his
2 staff is here, I believe.

3 Secretary Flynn? No? Was here.

4 And we also have some folks from The Hill
5 represented. We have Senator Udall's staff here as
6 well as Congresswoman Lujan Grisham's staff. So I
7 appreciate them coming down and participating in
8 this event.

9 So as noted before, there's a list of
10 speakers who contacted the Board ahead of time, and
11 that was posted at the entrance of the room. We've
12 generally listed speakers in the order of which they
13 contacted us, if possible, when they wish to speak.
14 Our General Counsel will actually call the speakers
15 in this order, and I ask that speakers state their
16 name and their affiliation at the beginning of their
17 comments. There's also a table in the room for a
18 sign-up sheet for members of the public who wish to
19 make comments in addition to those who have already
20 notified us and who have already signed up.

21 To give everybody wishing to make a
22 comment equal opportunity, we ask that speakers
23 limit their original comments to three minutes, and
24 we'll give them -- we'll give consideration for
25 additional time as the schedule allows. So please

1 remember that remarks should be limited to comments,
2 technical information, or data concerning the
3 subject of this public hearing, which is the
4 materials located at Area G at Los Alamos and the
5 TRU waste issue. And the Board Members may question
6 anyone who provides comments to the extent they deem
7 appropriate.

8 So I'm going to turn this over to my
9 Acting General Counsel, Mr. Biggins, to identify the
10 speakers for your three minutes. Thank you so much.

11 MR. BIGGINS: Thank you, Madam Chairman.

12 We have 20 individuals signed up to speak
13 this evening, including ten individuals who
14 preregistered to speak. I will call the speakers in
15 the order in which they signed up; and as the
16 Chairman noted, we ask that each speaker please
17 limit their comments to three minutes. I will let
18 each speaker know when they have reached three
19 minutes by requesting that they conclude their
20 comments.

21 The Board is keeping the hearing record
22 open until April 22 in case anyone would like to
23 submit a written statement or document into the
24 record. And we will need to make sure that the
25 speakers speak into the microphones that are placed

1 in the room so that the court reporter can pick up
2 the comments.

3 I'd like to call the first speaker,
4 Mr. Greg Mello, and then we will go to Marian Shirin
5 and Rebecca Moss after that. Thank you.

6 MR. MELLO: Thank you, Chairman Connery
7 and Members of the Board, and Principal Deputy
8 Administrator Creedon, and Assistant
9 Secretary Regalbuto, if she's still here, as well as
10 Field Officer Manager Lebak and Hintze also. Nice
11 to see you.

12 I've been -- for those who don't -- I'm
13 with the Los Alamos Study Group. I'm the Executive
14 Director of the Los Alamos Study Group. I'm here
15 with my coworker and wife Trish Williams-Mello.

16 I've been sporadically involved with LANL
17 environmental safety issues since 1984 when, as a
18 representative of the Environment Department, I was
19 the first external regulator to visit Los Alamos
20 National Laboratory to enforce environmental law
21 there -- in my case, hazardous waste law. I
22 subsequently worked on groundwater monitoring,
23 vadose zone monitoring at Los Alamos.

24 And I have to say that, as we approach
25 this issue tonight, much of it feels very familiar.

1 It feels like we've been over this territory before.
2 And back in 1984, the State was looking into how we
3 could close Area G. Area G was actually required to
4 be closed under the -- under RCRA by November 1985.
5 Area G was never -- was an admitted hazardous waste
6 disposal site, submitted a Part A Application but
7 never a Part B; neither was it ever -- did it ever
8 experience closure. So it's been in a -- if you
9 like, in a legal limbo since 1985.

10 All of the problems that we see today at
11 the laboratory have deep roots -- deep roots in the
12 culture, deep roots in the failure of regulators
13 like myself to be able to get our arms around the
14 problem. We have a problem here in the state of
15 political independence. The Department of Energy
16 has a different kind of problem in that Congress has
17 limited its staff, as you're well aware. Ms. Lebak
18 needs more staff; Mr. Hintze needs more staff. And
19 it's hard to get them.

20 We went through a -- we acquired a kind of
21 fad a few years ago -- I would call it that -- of a
22 Contractor Assurance System, which was meant to
23 replace the need for some of this federal staff.
24 It's really a subset of the broader move toward
25 privatization in our society.

1 I spoke at a Defense Nuclear Facilities
2 Safety Board hearing at Los Alamos adamantly against
3 putting in place a Contractor Assurance System here
4 at Los Alamos. And I think that the Department --
5 excuse me -- the General Accounting Office and the
6 Inspector General in the congressional testimony
7 also spoke very negatively about reliance on a CAS
8 at high-hazard nuclear sites.

9 MR. BIGGINS: Mr. Mello, will you please
10 conclude?

11 MR. MELLO: Yes. Are we coming to the end
12 already?

13 MR. BIGGINS: Yes.

14 MR. MELLO: Ah. So the narrowness of this
15 hearing is -- it's reassuring to note that, as we
16 do, that the Defense Safety Board is bringing a
17 laser focus to these technical issues. On the other
18 hand, it's concerning because the broader issues of
19 safety culture of management at the laboratory --
20 the structural issues -- are the root causes of this
21 particular accident that has brought us here and is
22 keeping -- and is percolating down through the
23 problem of the 60 drums that we've been talking
24 about most of the evening. And we haven't really
25 got at those root causes.

1 Am I completely out of time?

2 MR. BIGGINS: Yes.

3 MR. MELLO: Ah.

4 MR. BIGGINS: We recognize it's a short
5 period of time for speakers.

6 UNIDENTIFIED SPEAKER: Five more minutes,
7 please.

8 MR. MELLO: Perhaps I'll get another
9 chance to talk later.

10 MR. BIGGINS: Thanks.

11 MR. MELLO: And I appreciate your time.
12 Thank you very much.

13 MR. BIGGINS: Thank you.

14 And so Marian Shirin, please. And then
15 we'll go to Rebecca Moss.

16 MS. SHIRIN: Good evening. My name is
17 Marian Shirin. I am a retired city planner,
18 42 years a resident of Santa Fe.

19 Planning, when done right, and
20 implementation, when implemented in the spirit of
21 goodwill, can have many positive effects on region
22 and state.

23 First in the plan is the "why." What is
24 the vision or mission based on the needs of a
25 population?

1 Second are the "whats." What are the
2 goals? What is to be done to accomplish the
3 mission? And, very briefly, five or six goals,
4 maximum. In this case, in Los Alamos National Lab,
5 safety should be one of these goals and
6 transportation another one.

7 Third are the "hows." How is
8 implementation of the goals to take place --
9 budgets, time lines, personnel, action plans,
10 et cetera. And in the case of LANL, all of these
11 smaller portions of a plan are the tail wagging the
12 dog.

13 Finally, and perhaps most important, is
14 the evaluation and amendment or total change of the
15 vision or mission statement of the plan.

16 So an iterative and participatory process
17 designed to achieve long-term success is necessary
18 at Los Alamos National Labs. This comprehensive
19 process has never, in my experience, been
20 implemented by Los Alamos National Labs. I hope
21 that this panel will help to rectify this extreme
22 and dangerous oversight.

23 In closing, I will read a short poem about
24 599, a highway with which I have an intimate
25 relationship.

1 WIPP route. Yellow cake highway. One
2 year. One crossroad. Twenty-five crashes. Only
3 one fatal.

4 Thank you for your attention to these
5 matters.

6 MR. BIGGINS: Thank you, Ms. Shirin.

7 Rebecca Moss. And then we'll go to Astrid
8 Weber [sic] and Maj-Britt Eagle.

9 MS. MOSS: Hi. I'm actually not intended
10 to be registered. So I don't need to comment.
11 Thank you.

12 MR. BIGGINS: Okay. Astrid Weber.

13 MS. WEBSTER: Hi. My name is Astrid
14 Webster. I am a volunteer for the Los Alamos Study
15 Group. And I have a question to ask, which may or
16 may not be answerable.

17 I would like to know how many of the
18 people who have spoken and testified so far are
19 federal employees versus private contractors.

20 CHAIRMAN CONNERY: So I would say four out
21 of the six panelists were federal employees versus
22 contractors.

23 MS. WEBSTER: Thank you.

24 I am responding somewhat to the words
25 "Environmental Management." I would submit that the

1 effort to manage the environment through nuclear
2 weapons has not only created a lot of work for a lot
3 of people, who define their work as defense; it has
4 redefined what efforts we need to make and keep
5 discovering as new levels of damage that thrust has
6 revealed.

7 Congresswoman Tulsi Gabbard recently said,
8 while questioning a member of the nuclear weapons
9 community, "I've seen the pictures." And I'd like
10 you to know there are pictures in my backpack
11 because a few years ago I volunteered at the
12 Los Alamos Disarmament Center, and we had very large
13 pictures there.

14 And what I realized, having been part of a
15 German Rocket Community as a young child, that the
16 truth about that's never been fully revealed. And
17 I've been learning in my permaculture class that
18 nature bats last. And I would submit to you that
19 nature's not through batting yet.

20 I remember hearing about green glass that
21 was innocently brought home from the Trinity site,
22 and imagine how this [inaudible] who just wrote a
23 letter to the New Mexican about this very topic
24 we're discussing.

25 I was born in Leisnig, Germany. We went

1 to El Paso, Texas, and ended up a good portion of my
2 childhood living near the Trinity Site, less than
3 90 miles away. My father ended his career as the
4 chief scientist at Holloman Air Force Base. Many,
5 many times as a child, I saw chemtrails. We heard
6 sonic booms over our farm. And the work there has
7 only partially been revealed. And I would submit to
8 you that what has happened at the Trinity Site is
9 only now being revealed. There are down-winders who
10 are ill.

11 And so all of your well-intentioned and
12 good-hearted efforts to control this haven't stopped
13 the damage caused by the peaceful atom. They
14 haven't caused -- stopped the damage at Chernobyl
15 nor at the Columbia River nor at Three Mile Island,
16 and the toll keeps going up and up and up as
17 Fukushima spills away. And what I would like to say
18 is nature is not nearly done with us yet.

19 And I think this industry was born out of
20 a wish to dominate, was born out of a wish not only
21 to conclude World War II, which was pretty much
22 concluded, but a desire to win it so decisively that
23 no one would ever raise their head again.

24 And I just went recently to a deterrence
25 school at Kirtland Air Force Base, and the amount of

1 hutzpah there and the belief that they had command
2 was truly astounding. And I know you're working
3 really hard. I know you're trying really hard. And
4 the truth has never been revealed yet, nor has it
5 been written.

6 Thank you.

7 MR. BIGGINS: Thank you, Ms. Webster.

8 Maj-Britt Eagle. And then we'll go to
9 Mr. Don Hancock and Ms. Melissa Larson [sic].

10 MS. EAGLE: My name is Maj-Britt Eagle.
11 I'm loosely affiliated. I'm a student of Citizens
12 for a Nonradioactive Environment. We study the
13 Livermore Laboratories in California. But as I'm a
14 resident here in New Mexico, I'm also a student with
15 the Los Alamos Study Group.

16 We realize that the Nuclear Safety Board
17 convenes tonight because cost ought not to override
18 safety or profit outweigh the health of the
19 environment, the workers, the communities, those who
20 will inherit the earth. So we're grateful for this
21 hearing.

22 Admiral Hyman Rickover trained my husband,
23 a captain in the Nuclear Submarine Force. The rigor
24 of nuclear power school, its stress on safety and
25 technical training as its highest value contrasts to

1 the lax standards and less than moral integrity we
2 witness in New Mexico. While stationed with the
3 Submarine Force in Groton, Connecticut, we attended
4 a class in nuclear weapons authored by the American
5 Fransuers Committee, studied the strategic
6 intercontinental operating plan, the varying
7 capacities of strategic intercontinental tactical
8 theater, and suitcase nuclear weapons, and the
9 toxins generated by their production.

10 Few have the ability to look this Medusa
11 in the face without their hearts turning to stone,
12 yet it is this knowledge we require of you, of any
13 who would manage things nuclear. What I noticed in
14 our inquiry this evening is that this knowledge has
15 not awakened a robust and healthy fear. We fear
16 because we've learned to love, a love of place and
17 life.

18 Prince Andrei and Leo tell stories, War
19 and Peace lies wounded, in a meadow among the blood
20 of his comrades, gazing at a very blue sky. His
21 thoughts are in stark contrast to what we know
22 today. He imagines the pure, clear waters of the
23 earth to be perennial, enduring. The earth is
24 always renewed in the spring, but the management of
25 nuclear waste, as we have heard this evening,

1 threatens this vision.

2 We in Santa Fe ask that you impose three
3 qualifications on those who assume responsibility
4 for our safety: Rigorous, technical training on a
5 par with Admiral Rickover's; a scrupulous respect
6 for safety; and a robust and healthy fear such that
7 the love of place and life overrides consideration
8 of cost. Failing this, it is in the public interest
9 to close this facility.

10 MR. BIGGINS: Thank you.

11 Mr. Hancock.

12 MR. HANCOCK: Good evening. I'm Don
13 Hancock from Southwest Research and Information
14 Center, based in Albuquerque, a 45-year-old
15 organization that works on a variety of
16 environmental justice and natural resources and
17 health issues. I've been involved with nuclear
18 waste issues in the WIPP site for more than 40
19 years.

20 So my first quick point is I very much
21 appreciate the Board, the Board being here tonight,
22 the Board having officials come and speak to the
23 public and answer questions, something that should
24 happen frequently but does not happen frequently and
25 in a public context. In that regard, I also

1 appreciated you going to Carlsbad on April 29 last
2 year to have a hearing on WIPP.

3 The Board, as you know -- but many people
4 in the audience don't know so well -- is very small
5 and understaffed itself. In addition to Los Alamos
6 and WIPP problems, you have to deal with Livermore
7 and Pantex and Oakridge and Savannah River Site not
8 to mention Hanford and Idaho and other difficult
9 places. So I appreciate that. The point of saying
10 that is that, A, you are appreciated; and, B, we
11 need to have you do even more. And I know that's a
12 hard thing to hear; but, especially related to WIPP,
13 it's going to be very important.

14 Three words that to me were recurring
15 tonight, but I'm going to use a little different
16 context for them. One is "rush." Another is
17 "safety." And another is "delay." And they're all
18 related.

19 Los Alamos was in a rush to complete the
20 3706 program, to get this waste, including these
21 nitrate salts, to WIPP by June 30, 2014. And in
22 rushing to do it, did they succeed? No. Because
23 they weren't focused on safety; and the rush
24 resulted in delay, not safety and not
25 accomplishment.

1 As Greg Mello said -- and as many people
2 say -- we've been here before. Los Alamos's
3 shipments to WIPP have been shut down before because
4 of violations. And we were assured then it wouldn't
5 happen again. It did.

6 WIPP is now rushing to get open by --
7 before Secretary Moniz leaves office. Not a good
8 reason to reopen the facility. Not a good reason to
9 take care of safety. And not -- and what it's going
10 to result in, I would argue, is further delay
11 because there are going to be more problems. The
12 facility is unable. The facility was a start-clean,
13 stay-clean facility. It's now a start-clean,
14 be-dirty facility. So it will have to operate
15 totally differently if it's to operate at all. It
16 can't get back into operation from a ventilation
17 standpoint the way it was in February 2014 until
18 2021 at the earliest. And that's based on not
19 having a schedule and not knowing what the costs are
20 of the new ventilation and exhaust shaft down there.

21 So the idea that WIPP is going to open
22 soon and solve Los Alamos's 60 drums and other drums
23 is a myth. The Idaho National Lab has more than
24 600 shipments ready to go and a legal requirement
25 that they be out in 2018, which will be missed. So

1 let's -- it's distressing for people who are here to
2 kind of hear that solutions are going to come maybe
3 in the next two years or so. And I appreciate the
4 Board trying to pin down some of those time frames,
5 but it's not going to happen.

6 MR. BIGGINS: Mr. Hancock, would you
7 conclude, please.

8 MR. HANCOCK: The last thing to say is
9 safety culture at Los Alamos is weapons culture and
10 at WIPP it's expansion culture. Rather than
11 focus -- the reason WIPP had the problems that it
12 did is because it was focused not on its mission of
13 operating safely but on expanding facility. It's
14 still the Department of Energy and its various
15 offices' goal to expand WIPP to surplus plutonium,
16 to greater than Class C waste.

17 And the nuclear energy part of DOE is in
18 the process, as we speak, of doing a, quote,
19 "consent-based process" to get the folks in
20 Southeastern New Mexico to consent to WIPP being
21 expanded to be the nation's defense high-level waste
22 depository. That's not the way to have either
23 safety or assurance for the public that we're not
24 going to see this same record played over and over
25 again due to detriment of workers and the public.

1 Thank you.

2 MR. BIGGINS: Thank you.

3 Melissa Larson. And then we'll go to
4 Mr. Herbert Lester Plum and then Mr. Willem Malten.

5 MS. CARSON: Okay. Good evening everyone.
6 And thanks for doing this forum tonight. I suppose
7 we're getting some information about the activities
8 at Los Alamos.

9 But why empty Area G in order to fill it
10 again with more waste? Is that what we're emptying
11 this out for, or are we continuing to produce
12 nuclear weapons in Los Alamos and causing more
13 waste? I think what is the WIPP remediation? What
14 happened to Rocky Flats? And why is Los Alamos
15 invested in making plutonium triggers for nuclear
16 weapons?

17 What is the CAP for the MAR, or what is
18 the corrective action plan for Materials at Risk?
19 What is the JON for TRU waste? We mean what is the
20 Judgment of Need for transuranic waste? What is the
21 Potential Inadequacy of Safety Analysis? Could it
22 be that plutonium escapes into the environment? And
23 there's no safety in that. What would be the damage
24 ratio? What part of nature would be damaged in
25 northern New Mexico like Rocky Flats, a Superfund

1 Cleanup Site?

2 Well, the Waste Characterization and
3 Reduction and Repackaging, that WCRR -- I think it
4 was some kind of plutonic waste. Is that -- I'm not
5 saying satanic, but it seems like it could be very
6 destructive to the world and nature and this
7 beautiful place that we all live here.

8 And we have to figure in the future of the
9 generations and what might be the real safety
10 implications of continuing the program at Los Alamos
11 today even though we really didn't get a good idea
12 of what they are doing now. But we know that
13 there's a lot of federal government funding that
14 goes into supporting the work over there.

15 And if it's causing the people to get
16 harmed by lots of cancer in the area and -- I think
17 that those kind of things need to be investigated
18 about the true safety. And "TRU," as in transuranic
19 waste -- what is TRU safety.

20 So I'm just here because I'm a concerned
21 citizen. And I've lived here for -- ever since they
22 were trying to make the WIPP facility down there
23 and, of course, protested that because it could be
24 unsafe to the people in New Mexico. And it's proved
25 that it probably was unsafe and maybe will be unsafe

1 when it's reopened again. I think the whole mission
2 of Los Alamos may be unsafe to the people of
3 New Mexico and the planet.

4 And I think we need to reconfigure what we
5 are doing over here and what is the need for the
6 planet and the scientists who know a lot at
7 Los Alamos. I'm very interested in chemistry and
8 the elements and what -- this earth and what it all
9 means for all of us. But I think we must be careful
10 about how we're using these elements and what we're
11 making from them since we can make destructive
12 things and creative things from nature.

13 And I'm concerned about the safety of the
14 destructive enterprise of making nuclear warheads in
15 this world today when war isn't over and war is just
16 beginning maybe again.

17 So I'm just going to leave that -- those
18 thoughts with you. And thank you for your
19 attention.

20 MR. BIGGINS: Thank you, Ms. Larson.

21 Mr. Herbert Lester Plum. Mr. Plum?

22 He was signed up in advance. So I don't
23 know if he's present tonight.

24 So we'll go to Mr. Willem Malten. And
25 then we have Susan Musgrave.

1 Mr. Malten.

2 MR. MALTEN: Thank you, Members of the
3 Board. My name is Willem Malten. I'm a baker here
4 in Santa Fe, and I'm also a member of the Los Alamos
5 Study Group.

6 In my little talk here, I'd like to stress
7 three things: Institutional amnesia, no place for
8 more waste with WIPP being closed, and the legal
9 responsibility and consequences of what happened
10 here.

11 Okay. So almost 20 years ago June 8,
12 1997, I had some time to waste in Los Alamos.
13 Around the pond, Ashley Pond, in the center of
14 Los Alamos, there happened to be a fair with some
15 rides, et cetera. But there was also displayed a
16 series of emergency vehicles for the audience --
17 mainly children -- to explore.

18 In front of the fire truck, there was an
19 instrument on display that I had never seen before,
20 four legs and some kind of cutting tool looking like
21 a knife point hanging in the middle. So out of
22 curiosity, I asked some questions to the attending
23 officials. They were quite proud of this tool since
24 they had invented it themselves right there at the
25 laboratory. It was a remote 55-gallon drum opener.

1 "Why would you need it?"

2 "Well, on Area G and under those tents,
3 there are many, many of these 55-gallon drums."
4 They explained to me that sometimes one of these
5 barrels would swell up and explode just like what
6 happened at WIPP. But we are talking here about a
7 much longer time ago, 1997. And before they had the
8 instrument that was now in the fair, one of the
9 employees of the lab would have to forcefully open a
10 swollen drum, and some of the content would spray
11 out and threaten to cover the employee as well as
12 the environment. And it happened often enough that
13 they had to invent this tool, a remote 55-gallon
14 drum opener, so as to prevent at least the drum --
15 at least the direct human contamination.

16 "How often do these drums swell up," I
17 asked?

18 "Oh, in the last months only, personnel of
19 Area G have decommissioned more than eight drums."

20 "And what was the cause of the swelling?"

21 I was told then in 1997 the drums used to
22 have an asbestos lining, toxic to humans but very
23 stable for -- very stable, and the personnel was
24 told then in 1997 the drums used to have -- the
25 drums -- they decided to switch to an organic

1 compound just like the kitty litter.

2 MR. BIGGINS: Mr. Malten, would you please
3 conclude your remarks?

4 MR. MALTEN: Okay. Okay. Doing much more
5 of the nuclear work at Los Alamos without being able
6 to store the waste at WIPP is irresponsible. And I
7 think the people that are responsible for this kind
8 of activity -- just like BP in the Gulf, they should
9 have legal -- faced legal consequences.

10 MR. BIGGINS: Thank you, sir.

11 Ms. Susan Musgrave. Okay. Ms. Musgrave
12 was preregistered. So I don't know if she's in
13 attendance tonight.

14 And we'll move to the list of speakers
15 that signed up this evening. Mr. David Torney. And
16 then after Mr. Torney, we have Louis Natofa [sic],
17 and Violette Alby.

18 MR. TORNEY: I'm David Torney from Jemez
19 Springs.

20 MR. BIGGINS: Sir, that microphone doesn't
21 seem to be on.

22 MR. TORNEY: Okay. Sorry.

23 David Torney from Jemez Springs. And I
24 want to ask your help in preventing the sending of
25 any more plutonium to Los Alamos Laboratory. If you

1 can do that -- I'm speaking on behalf of Mother
2 Nature, and I want you to do your best. This part
3 of the country is a wildlife refuge. We've had
4 enough bad things come here from outside. It's time
5 to put an end to it. You can deal with the
6 legacies, but we want to prevent bad things
7 happening in the future.

8 And here's a picture I took in the Rio
9 Grande Gorge a couple weeks ago. So keep this in
10 mind on your travels. Thank you for coming.

11 MR. BIGGINS: Thank you, sir. Would you
12 like to submit the picture for the record?

13 MR. TORNEY: Sure.

14 MR. BIGGINS: Okay. My Associate Counsel
15 can take a picture of that and...

16 Now we can have Mr. Louis Latofa [sic].

17 MR. TAFOYA: Good evening. My name is
18 Louis Tafoya. I'm from Taos, New Mexico, retired
19 military. And my concern in this radiation and
20 waste materials has come to my attention quite a bit
21 because we don't realize how serious it is to have
22 the damage and the dangers of nuclear waste,
23 radiation, until it hits your family and your
24 community. And right now Taos County is now the --
25 has got the highest rate of cancer deaths compared

1 to any county in the state of New Mexico. And
2 that's because of the -- what they called at the
3 Los Alamos -- what Los Alamos called a scientific
4 experiment of released radiation up in the Taos
5 County area in the Sangre de Cristo Mountains. And
6 their experiment was to see how many -- what would
7 it do to the animals, domestic and wildlife.

8 And when that happened after the --
9 Los Alamos decided that they would start
10 investigating how much radiation those animals had,
11 they went up there, and they started picking --
12 taking these animals. And they would shoot them
13 down, tranquilize them, pick them up with a
14 helicopter, and take them to Blanco, Colorado, to be
15 examined to see how much radiation these animals had
16 and to see how much radiation the consumers would be
17 affected. But like I say, right now Taos County has
18 got the most deaths of cancer in the state of
19 New Mexico.

20 There was -- I gotta give credit to the
21 Los Alamos for trying to convince us that it was the
22 space aliens that were killing these cows and
23 animals. They were shooting them down. They did
24 all kinds of propaganda to convince us that it was
25 the space aliens that were killing these animals,

1 domestic and wildlife. I've got a picture here of a
2 cattle sign. It's all over the -- stamped all over
3 the county of Taos. I want to pass it out if you
4 want.

5 Los Alamos did a good job of trying to
6 convince us that it was the space aliens that were
7 doing this to the animals.

8 The findings of two law enforcement
9 officers in Taos County -- one was a state police
10 officer, and the other was a cattle inspector. When
11 they did their investigation, they found that those
12 animals were being shot at, picked up by helicopters
13 taken to Blanco, Colorado, for examination. After
14 they examined the animals to see how much radiation
15 they had, they'd come back and drop them back into
16 the landowner's or the rancher's property. And they
17 were telling us -- there's a lady up in Taos that
18 does a lot of investigation on this. Her name is
19 Dreamwood, and she's done a lot of investigation.
20 And she's convinced -- because I went to one of her
21 meetings, and she told us that it was the space
22 aliens. And I told her that I wanted to speak at
23 that conference. And she wouldn't let me because I
24 was going to tell them that it was the Los Alamos
25 laboratory folks that were doing this experiment.

1 MR. BIGGINS: Sir, will you please
2 conclude your remarks.

3 MR. TAFOYA: Pardon?

4 MR. BIGGINS: Will you please conclude
5 your remarks.

6 MR. TAFOYA: Okay. Like I say, those two
7 investigators were fired by Pete Domenici and Gary
8 Johnson, who is our ex-governor. Those two officers
9 were expelled from the job. After they confiscated
10 all the reports, the computers, and all, then they
11 were let go from their jobs. So just to let you
12 know that we had our senators, our congressmen, and
13 our governors involved in this drastic disaster.

14 I have a friend of mine, Lee Cordova, who
15 was a retired -- he's a retired -- he lost 16 cows
16 to this.

17 MR. BIGGINS: Sir, your time is up.

18 MR. TAFOYA: And then there's another
19 friend that lost two, almost three, that pretty much
20 left him without any income.

21 But I stand to be corrected if the
22 Los Alamos can come up and tell me -- show me videos
23 of a spaceship picking up a dead cow, taking it to
24 Blanco, Colorado, and bringing it back. If the
25 Los Alamos can show me that, I stand to be

1 corrected, and I will apologize. Right now --

2 MR. BIGGINS: Sir, we need to move on to
3 the next speaker.

4 MR. TAFOYA: You've got to end this deal
5 that the space aliens are doing it. It's not the
6 space aliens.

7 Thank you.

8 MR. BIGGINS: Thank you.

9 Violette Alby. And then we have Carol
10 Ripatozmoran and Allan Sindelar.

11 MS. ALBY: Hello. Thank you for your
12 panel, and I urge you to come back. I think this
13 discussion is only starting.

14 I lived downwind from Los Alamos when the
15 Cerro Grande fire happened. We had -- and I'm
16 living in Ojo Sarco, which is Rio Hondo --

17 MR. BIGGINS: Ma'am, excuse me. The court
18 reporter's having trouble hearing you. Can you
19 lower the microphone?

20 MS. ALBY: I live downwind from
21 Los Alamos, and --

22 MR. BIGGINS: Thank you.

23 MS. ALBY: -- we experienced the downwind
24 specifically after the Cerro Grande fire. And my
25 neighborhood was showered by sparks. And a lot of

1 the discussion tonight was about fire, but nobody
2 talked about how fire makes its own weather. And I
3 know that lot around Los Alamos has burned by spark
4 fly. And then one of the panelists mentioned the
5 extension cord and how the venting could just go
6 off. Unfortunately, it's just -- like you said,
7 there is a -- kind of cultural. It doesn't seem to
8 realize that they have the life of so many people
9 around them at stake.

10 Now, I asked many times. There were many
11 meetings after the Cerro Grande fire because people
12 were really concerned and with good reason. Ten
13 years later, we're the vital statistic. Just like
14 Mr. Tafoya, I'm very concerned. At the time two
15 young daughters -- they were 13 and 14. Something
16 people should know, 20 -- the risk for female to be
17 damaged by radiation is 20 times especially when
18 they are adolescence, the risk of man, and then --
19 all those things.

20 But I think that you should reconsider the
21 safety of WIPP, of Los Alamos. And maybe it's time
22 to, you know, warn me and the very people we're
23 trying to protect. If you can solve that riddle,
24 I'll go with your program. Until then, I won't.

25 And will you please try to see if you can

1 clean up and shut down, please. You're ruining the
2 most beautiful, sacred land on side of the mountain.
3 And you give us the map. Why don't you give us the
4 300 faults? What about the wind velocity that
5 happens in Los Alamos in the summer when it's
6 thunderstorm. That roof over those things could
7 just blow up.

8 Now, I would love to come back six months
9 from now and see if those concerns have been
10 addressed. And a mobile lab that could go around so
11 that if there's -- like happened at the Cerro Grande
12 fire, some emission, you could find out where they
13 are and try to stay away from the place. As you
14 know, nuc -- you can't see it, you can't smell it,
15 you can't touch it. Please help us.

16 Thank you so much.

17 MR. BIGGINS: Thank you.

18 Do you want to submit your map for the
19 record, for the hearing record?

20 MS. ALBY: Absolutely.

21 MR. BIGGINS: If you'll bring it up to the
22 court reporter's table, please.

23 Next we have Ms. Carol Ripatozmoran.

24 MS. RIPATOZMORAN: Hi. Welcome. Thank
25 you, guys.

1 I just wanted to say that, first and
2 foremost, we have to remember that the land before
3 Los Alamos and everyone that got there was and
4 hopefully still is sacred; and, two, we have to
5 protect that and, yes, ourselves.

6 But more than anything I want to remind
7 you guys that you guys and all of us here -- we're
8 all sparks of Father God on an adventure as all of
9 us. And in that light, I ask you guys to remember
10 that. I ask you guys and all of you people here to
11 surround all the people that have ever been at
12 Los Alamos, that are there now, especially the
13 workers, with the white light -- capital L -- the
14 light of God, the light of Christ, your prayers, and
15 to ask for wisdom and knowledge for all you guys.

16 And basically that's pretty much it. That
17 way we can get past this because we are all
18 accountable, not only to each other and to the
19 children and the future, but to Father God.

20 And, well, I'm from Cimarron, and I have
21 Gift of God Healing Center & Art Studio. And as
22 I -- I do copper, silver, tin, lead. So for me it's
23 interesting to study all the various elements, and
24 some of them truly are dangerous. And because of
25 that, well, I'm asking you guys to ask for the

1 wisdom and knowledge and for Father God to help and
2 guide you to get to the bottom for the best way
3 possible for all of us, not only as Americans but
4 for the rest of the world because whoever said we
5 don't need World War III, IV, and XCIX because there
6 won't be anything because the severity and the
7 strength of these weapons.

8 So on that level, though, please remember
9 what I said. And remember to ask for wisdom and
10 knowledge in your jobs and to surround all the
11 people at Los Alamos, whoever they are, with the
12 light and the truth of God. And then that way you
13 can do and be your best and not, well, get the royal
14 kick when we do face the creator. And as I said, he
15 created all of us, and we need to remember that.

16 And I'm from Taos and Cimarron too. So I
17 understand where he (indicating) is coming from.
18 And all I can say is God bless you and all of you.

19 And all you guys remember to surround all
20 of these people with the light. That way, well, we
21 can all use our minds and make it better, stronger
22 for all of us.

23 God bless you guys.

24 MR. BIGGINS: Thank you.

25 Allan Sindelar. And then we'll go to

1 Mr. Scott Kovac.

2 MR. SINDELAR: My name is Alan Sindelar.

3 I come as a private citizen and longtime resident.

4 When I learned about the drum at WIPP
5 exploding, I looked into it enough sufficiently to
6 find out that it was two letters in an instructional
7 directive. It was the word "organic" that was
8 somehow turned to the word "inorganic." Spellcheck
9 won't catch that.

10 I offer that we are playing with something
11 that is beyond our ability to contain. We are
12 working with materials that exist only to destroy.
13 With all of the advanced degrees, with all of the
14 tremendous wealth of the city on the hill, we are
15 operating above our level of intelligence,
16 understanding, and wisdom as humans. We should not
17 be playing with these materials in the way that we
18 have.

19 Thank you.

20 MR. BIGGINS: Thank you, sir.

21 And Mr. Scott Kovac.

22 MR. KOVAC: Good evening. My name is
23 Scott Kovac with Nuclear Watch New Mexico.

24 Thank you, Members of the Board. Welcome
25 to Santa Fe.

1 We're getting a good little glimpse of how
2 dangerous these materials really are. There's very
3 smart people, very hard-working people, yet it still
4 gets away from us.

5 There was talk about waste minimization.
6 I have an idea. Don't make pits you don't need.

7 It's my understanding that the solid waste
8 boxes are not tested for an internal thermal event,
9 that is, a fire that starts inside of them. So I
10 would request you kind of check into that.

11 I have the latest safety basis report for
12 Los Alamos National Laboratory. There's
13 15 facilities. Each of these safety basis reports
14 is due to be updated annually. The average of all
15 of these are three to four years old. This is an
16 ongoing problem at the laboratory. We need to try
17 to address that. Thank you.

18 The 60 drums are getting a lot of
19 attention. And it's about 20 cubic meters or so,
20 and it's the part of the 400 cubic meters, kind of
21 the end of 3,706 campaign, which was 3,706 cubic
22 meters of transuranic waste to go to WIPP. The
23 half-life of plutonium-239 is 24,000 years.

24 The corrective measures evaluation for
25 Area G at Los Alamos gives us some estimates of the

1 waste buried there. The TRU estimated in Los Alamos
2 Area G is 41,000 cubic meters; also, the low-level
3 radioactive waste in Area G, 645,000 cubic meters.
4 This is all planned to be left behind.

5 The TRU waste at WIPP is buried 2,100 feet
6 underground. WIPP has a performance assessment of
7 10,000 years. The estimated 41,000 cubic meters of
8 TRU at LANL is only buried less than 65 feet deep,
9 and yet it only has a -- it only has a performance
10 assessment of 1,000 years.

11 DOE should perform a 10,000-year
12 assessment on all TRU waste buried in Los Alamos.

13 Thank you.

14 MR. BIGGINS: Thank you, sir.

15 Next we have Mr. Jay Coghlan and after
16 that John Tauxe and Susan Gordon.

17 Mr. Coghlan.

18 MR. COGHLAN: I'm Jay Coghlan with Nuclear
19 Watch New Mexico. I want to start by stating my
20 appreciation for the Board over all these years.
21 You've been at it since the late 1980s. You've done
22 really good work. I appreciate it. The somewhat
23 neoconservative elements with Congress trying to cut
24 you year after year, but I appreciate your ability
25 to keep on going and provide the important

1 information that you do.

2 I'm going to try to cram in four
3 recommendations in three minutes, and I may not get
4 to them all.

5 I have with me two documents that were
6 released this last month, and one of them's the
7 preliminary notice of a violation by the NMSA
8 headquarters. Then the other one is a DOE Inspector
9 General Report on how Los Alamos Lab addresses
10 issues. And then from the Notice of Violation, it
11 becomes very clear that essentially Los Alamos Lab
12 does not follow DOE orders. And I can't profess to
13 have, you know, intimate knowledge of DOE orders.
14 But, in general, I think they're pretty good.

15 And what I'm suggesting is a root problem
16 is -- I'm going to call it "LANL exceptionalism,"
17 that it thinks it's an entity unto itself, that it
18 can tweak DOE orders to serve its own ends. And if
19 you go line by line through this Notice of
20 Violation, you see in detail how Los Alamos
21 apparently intentionally strayed from DOE orders.
22 And these are clear violations of orders if not
23 legal provisions under New Mexico State law as well.

24 And then I cited the DOE Inspector General
25 Report, which is kind of congruent with the Notice

1 of Violation. It basically comes to the conclusion
2 that, in half of the cases, roughly 200 cases, which
3 were deemed to be, quote, "serious issues," the
4 laboratory was incapable of identifying let alone
5 addressing root causes.

6 And I want to suggest again that a root
7 cause that led to the closure of WIPP was LANL
8 exceptionalism where the lab thinks that it can
9 tweak DOE orders. And it erupted a barrel that led
10 to the closure of the multibillion-dollar Waste
11 Isolation Pilot Plant.

12 So my first recommendation is make
13 Los Alamos Lab stick to and follow DOE orders.

14 Now, second recommendation is y'all have
15 done some very good work on whistle-blower
16 protection specifically at Hanford, and you need to
17 look at that across the complex. I sat here
18 listening to some bland anecdote given by
19 Director McMillan, how he solved some staff person's
20 problems over comfort level. Well, that was a
21 little endearing anecdote to hear, but it doesn't
22 satisfy my concerns over whistle-blower protection.

23 I personally know of three federally
24 protected whistle blowers and know of many others.
25 Los Alamos has a long, long history of

1 whistle-blower retali- -- excuse me -- retaliation.

2 MR. BIGGINS: Sir --

3 MR. COGHLAN: I ask the Board to go
4 further in protecting whistle-blowers.

5 So, yeah. You're going to tell me I ran
6 out of time. It's always this ridiculous situation
7 in which there's a lot of empty talk and we're
8 limited to three minutes. That's pretty sad. I'll
9 submit written comments to follow up with.

10 But, again, my appreciation to the Board.
11 Keep at it. You're very invaluable.

12 MR. BIGGINS: Do you want to submit your
13 two documents for the record, sir?

14 MR. COGHLAN: They're impromptu and not
15 yet in written form. So --

16 MR. BIGGINS: Okay.

17 MR. COGHLAN: -- I will.

18 MR. BIGGINS: Thank you.

19 Mr. Tauxe.

20 MR. TAUXE: I'm John Tauxe. I'm an
21 environmental engineer and a resident of Los Alamos.
22 Lived there for the last 18 years. I've been
23 involved in radioactive waste for the last 25 years
24 or so. I guess I'm dating myself there. And full
25 disclosure: I count as among my clients Department

1 of Energy and Los Alamos National Lab in the past.

2 And I will say that, of all the DOE sites
3 and other facilities around the country, nobody
4 lives more intimately with their radioactive waste
5 than we do in Los Alamos. There are places in town
6 where you can throw a rock across a chain link fence
7 and hit a rad-waste site. Recently a big one was
8 cleaned up, which is wonderful. I live about a
9 quarter mile from that one.

10 And I just want to thank DNFSB for being
11 here and for its work in holding Department of
12 Energy's feet to the fire. I think sometimes that's
13 really necessary to make things happen. And I
14 really appreciate the focus you've given that and
15 given this particular issue, which I find is just an
16 appalling mistake that led to this colossal expense
17 and difficulty for all the complex.

18 I really believe in radioactive waste
19 management and effective radioactive waste
20 management. We have to do something with it. WIPP
21 is a great solution. It was a shame to see it put
22 in that position.

23 But, also, I came here with the hope that
24 I would get some more warm, fuzzy feelings, that I
25 would gain confidence in what's happening south of

1 Los Alamos across the canyon. And yet I have to
2 admit that I am leaving with less confidence than I
3 came in with. So I really am -- as someone who is
4 right there, nearest receptors, as opposed to folks
5 in Santa Fe and Taos and even Jemez -- that we're
6 really counting on folks like DNFSB to improve the
7 situation.

8 Thank you much.

9 MR. BIGGINS: Thank you, sir.

10 Ms. Susan Gordon and then Mr. George
11 Anastas.

12 MS. GORDON: Good evening. I want to
13 start by thanking the Board for your work. I think
14 it's been essential over the years, and we really
15 appreciate you doing your job. And, you know, let
16 us know how we can keep you funded in going forward.

17 I want to make three points.

18 One is I want to remind us that, before
19 the National Nuclear Security Administration was
20 created, the Environmental Management Program, all
21 of the cleanup was handled separately and not under
22 NNSA. And so I think it's a good thing that that
23 program -- cleanup is being separated back out. We
24 always felt that moving cleanup under the weapons
25 program would mean that it wouldn't happen, that the

1 competition for money would go to weapons and not to
2 cleanup. So I am glad that that separation is
3 happening again, and I look forward to more cleanup.

4 I wanted to thank Mr. Santos in particular
5 for bringing up the issues around the corrective
6 actions that have come out of the Accident
7 Investigation Board. I believe that there were
8 nearly 600 corrective actions at -- and maybe it was
9 at WIPP but another about 200 that were at
10 Los Alamos. That's a lot of corrective actions, you
11 know. And it would be interesting to see that list
12 of corrective actions and what steps have been taken
13 to address those concerns. That's a lot. I mean,
14 you know, if they made one corrective action -- one
15 a day, it would take years to get it all done. So
16 that's a lot of work, and I think we need to keep
17 monitoring what's going on.

18 The last thing is that the New Mexico
19 Environment Department does have a key role in this.
20 And their job is to protect the state, to protect us
21 as community members, to protect our air, the
22 environment, the water in particular. And so their
23 job, part of their role, is to levy fines against
24 Los Alamos and Department of Energy for those
25 failures identified in the 600-plus corrective

1 actions. But instead of actually making the
2 Department of Energy accountable for their actions,
3 for their mistakes, the Environment Secretary, Ryan
4 Flynn, negotiated a settlement with LANL.

5 Now, that negotiated settlement allows
6 LANL and DOE to move forward with their wish list of
7 projects that they wanted to do anyway. So instead
8 of paying a fine and hurting, out of their pocket,
9 they get to do their wish list, which includes
10 building roads to improve access for more waste
11 coming into New Mexico around Carlsbad and for
12 continuing to make nuclear weapons at Los Alamos.

13 So I don't know what the role of the Board
14 is in terms of, you know, accountability and working
15 with the State to make sure that there's some
16 accountability towards LANL and Department of
17 Energy, but I think that that is really lacking and
18 they're getting away with murder.

19 Thank you.

20 MR. BIGGINS: Thank you.

21 Mr. Anastas.

22 MR. ANASTAS: Good evening and welcome to
23 Santa Fe. Thank you for all your hard work.

24 I appreciate the opportunity of presenting
25 several comments to you about tonight's discussions,

1 but I will follow up with a written response. And
2 my comments relate to the training.

3 At your April meeting last year down in
4 Carlsbad, I gave the Board a report on drum
5 detonations in the DOE complex, and the report was
6 up to about 1990. And I really am asking the Board
7 to see if somehow that report can be updated with
8 drum detonations in the DOE complex as well as
9 international events which have occurred at -- in
10 the U.K. and in Russia and in France so that DOE and
11 its contractors can learn from some of these other
12 events that have taken place.

13 Additionally, I did recommend at the April
14 meeting that perhaps for the training for the waste
15 operators there be a written proficiency examination
16 so that there is some record of the waste handlers
17 actually mastering the procedures and protocols that
18 they should follow and, when they see orange and red
19 smoke come from the drum, what they should do and
20 perhaps go beyond their supervisor to a specialist.

21 The last item is that with rigorous
22 training and examinations at LANL and buy-in by LANL
23 management, I think that will assist in the
24 improvement of the safety culture at the laboratory.

25 And, again, I will follow up with a

1 written discussion on these points as well as
2 several other points.

3 Are there any questions?

4 Thank you very much.

5 MR. BIGGINS: Thank you, sir.

6 That concludes the list of public speakers
7 that I have.

8 Was there any other member in attendance
9 that signed up but didn't make it onto my list?

10 No? Okay. Then I yield back to the
11 Chair. Thank you.

12 CHAIRMAN CONNERY: I want to thank you so
13 much for your comments. And I remind you that the
14 public record is open for 30 days. So those of you
15 who made comments and want to submit something for
16 the record or those of you who didn't make comments
17 but still would like to submit something for the
18 record, you have the ability to do so until April 22
19 of this year.

20 I would also note there were some handouts
21 from the Department of Energy that were at the back
22 table, and I know that we didn't have enough of
23 those handouts to go around. So we will post those
24 handouts on our website, www.dnfsb.gov. So I would
25 direct you there if you are looking for any more

1 information. And, again, information about this
2 hearing and information about the complex in general
3 are located there.

4 I'm sorry. Did you have a question,
5 ma'am?

6 UNIDENTIFIED SPEAKER: Do you have a
7 report --

8 MS. CHANDLER: Could you go to the
9 microphone so the court reporter can get you?

10 UNIDENTIFIED SPEAKER: Sure.

11 Is it in the purview of this Board to look
12 into the suicide rate of young people at Los Alamos?
13 Because the work there is very influential. And
14 those records were not available because I looked
15 into them about ten years ago and couldn't find
16 anything. And there's a public health nurse here in
17 New Mexico who reports that level as quite high.
18 And at one point someone who was a former
19 resident -- former employee of LANL took me to
20 Los Alamos and took me to a friend's house, and she
21 said -- and he confirmed -- that he had four
22 children who committed suicide.

23 CHAIRMAN CONNERY: I'm sorry. That's
24 outside of the scope of our purview, but I
25 appreciate your comment.

1 So at this point I'd like to turn to my
2 fellow Board Members to see if they have any closing
3 comments for the record.

4 Mr. Sullivan?

5 MR. SULLIVAN: No, Madam Chair.

6 CHAIRMAN CONNERY: Thank you.

7 Mr. Santos?

8 MR. SANTOS: No, Madam Chair.

9 CHAIRMAN CONNERY: Mr. Hamilton?

10 MR. HAMILTON: No comments,
11 Madam Chairman.

12 CHAIRMAN CONNERY: So I'd like to take the
13 opportunity to thank our witnesses and their
14 organizations for supporting this hearing. I also
15 want to thank all those who attended either in
16 person or via the Internet as well as the elected
17 officials, other representatives of State and local
18 organizations, and congressional staff members who
19 were able to join us this evening.

20 Our goal for this evening was to gather
21 information on potential hazards to the public and
22 workers posed by the storage and processing of
23 transuranic waste at the Los Alamos National Lab and
24 the Department of Energy's plans to address these
25 hazards. Tonight we heard testimony from the

1 National Nuclear Security Administration, Department
2 of Energy, the Environmental Management Program and
3 Laboratory Leadership Team, as well as comments from
4 the public.

5 The Board will consider the information
6 gathered this evening to inform any actions we may
7 take regarding these issues in the future. Once
8 again, I thank everyone for their participation in
9 this hearing. The record for the proceedings will
10 remain open until April 22, 2016.

11 This concludes the public hearing of the
12 Defense Nuclear Facilities Safety Board. We are now
13 adjourned and off the record.

14 Thank you for attending.

15 (The hearing concluded at 9:11 p.m.)

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1 STATE OF NEW MEXICO

SS

2 COUNTY OF SANTA FE

3

4 REPORTER'S CERTIFICATE

5 I, STEPHANIE SLONE, New Mexico Certified
6 Shorthand Reporter, do hereby certify that I did
7 report in stenographic shorthand the proceedings set
8 forth herein and that the foregoing is a true and
9 correct transcription of said proceedings to the
10 best of my ability.

11 I further certify that I am neither
12 employed by nor related to any of the parties or
13 entities in this matter and that I have no interest
14 whatsoever in the final disposition of this
15 proceeding in any court.

16

17

18

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