1 DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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8 WIPP PUBLIC MEETING AND HEARING
April 29, 2015
9 12:00 p.m.
Walter Gerrells Performing Arts and Exhibition
10 Center
4012 National Parks Highway
11 Carlsbad, New Mexico

12 Vice Chairman Jessie H. Roberson
Board Member Sean Sullivan
13 Board Member Daniel J. Santos

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19 REPORTED BY: Mary Abernathy Seal, RDR, CRR, NM CCR 69
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1 Mr. John Pasko, Group Lead for Nuclear Materials
Processing and Stabilization, DNFSB
2
Mr. Carter Shuffler, staff, DNFSB
3
Mr. Dermot Winters, staff, DNFSB
4
Mr. Mark Whitney, Deputy Assistant Secretary for the
5 U.S. DOE, Office of Environmental Management

6 Mr. James Hutton, DOE Environmental Management Chief
Nuclear Safety Advisor
7
Mr. Jose Franco, DOE Carlsbad Field Office Manager
8
Mr. Sean Dunagan, DOE Carlsbad Field Office Senior
9 WIPP Recovery Manager

10 Mr. Robert McQuinn, Nuclear Waste Partnership
President and Project Manager
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Mr. James Blankenhorn, Nuclear Waste Partnership
12 Recovery and Deputy Project Manager

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1 SESSION 1
2 WIPP Recovery and Safety Improvements
3 VICE CHAIRMAN ROBERSON: Good afternoon.
4 My name is Jessie Roberson, and I'm the Vice
5 Chairman of the Defense Nuclear Facilities Safety
6 Board. I will preside over this public hearing and
7 meeting. I would like to introduce my colleagues on
8 the Safety Board. To my immediate right is Mr. Sean
9 Sullivan. To my immediate left is Mr. Daniel
10 Santos. We three constitute the Board.
11 The Board's acting general counsel,
12 Mr. John Batherson, is seated to my far left. The
13 Board's technical manager for the Nuclear Materials
14 Processing and Stabilization Group is seated to my
15 far right, Mr. John Pasko.
16 Several members of the Board staff closely
17 involved with oversight of the Department of
18 Energy's defense nuclear facilities at the Waste
19 Isolation Pilot Plant, or WIPP, are also here,
20 seated behind us. Today's hearing and meeting was
21 publicly noticed in the Federal Register on April
22 2nd, 2015. This hearing is held open to the public
23 per the provisions of the Government in the Sunshine
24 Act, as well as the Board's regulations implementing
25 the Sunshine Act.

1 In order to provide timely and accurate
2 information concerning the Board's public and worker
3 health and safety mission throughout the Department
4 of Energy complex, the Board is recording this
5 proceeding through a verbatim transcript, video
6 recording, and live video streaming.
7 The transcript, associated documents, and
8 public notice will be available for viewing on the
9 board's public website. In addition, an archived
10 copy of the video recording will be available
11 through our website for at least 60 days.
12 Per the Board's practice and as stated in
13 the Federal Register, we will welcome comments from
14 interested members of the public at the time
15 specified in the published agenda for this
16 proceeding. A list of those speakers who have
17 contacted the Board is posted at the entrance of
18 this room. We have generally listed the speakers in
19 the order in which they contacted us or, if
20 possible, when they wish to speak. I will call the
21 speakers in this order, and ask that speakers state
22 their name and title at the beginning of their
23 statement. There is also a table at the entrance to
24 this room with a sign-up sheet for members of the
25 public who wish to make a statement but did not have

1 an opportunity to notify us ahead of time. They
2 will follow those who have already registered with
3 us, and in the order provided.
4 To give everyone wishing to make a
5 statement an equal opportunity, we ask speakers to
6 be brief and that their comments be relevant to the
7 subject at hand. The Chair may interject if a
8 speaker exceeds five minutes, but will then give
9 consideration for additional time when the agenda
10 permits.
11 Statements should be limited to comments,
12 technical information, or data concerning the
13 subject of a public meeting and hearing, and the
14 Board members may question anyone making a statement
15 to the extent deemed appropriate.
16 The recording of this proceeding will
17 remain open until May 25, 2015. Until this date,
18 members of the public, including those observing
19 today's hearing live via video streaming may submit
20 a written statement to the Board to be included in
21 the record. Contact information for submitting a
22 statement is available on the Board's website.
23 I would like to reiterate that the Board
24 reserves the right to further schedule and regulate
25 the course of this hearing and meeting, to recess,

1 reconvene, postpone, or adjourn this hearing, and to
2 otherwise exercise its authority under the Atomic
3 Energy Act of 1954, as amended.
4 The Board's enabling statute defines the
5 Board's role to advise the Secretary of Energy
6 regarding actions that may be necessary to ensure
7 adequate protection of public health and safety,
8 including safety of the workers at DOE's defense
9 nuclear facility. The Waste Isolation Pilot Plant
10 is a nuclear waste disposal facility under the
11 control of the Secretary of Energy and falls under
12 the Board's junction. Therefore, one of the main
13 goals of the Board with this hearing is to inform
14 the public and stakeholders on key actions needed to
15 protect public and worker health and safety as DOE
16 recovers the facility from the two accidents that
17 occurred in February of 2014.
18 WIPP's primary mission is to isolate
19 transuranic waste in a deep geologic repository.
20 DOE generated those wastes during decades of defense
21 nuclear activities such as the development,
22 production, and dismantlement of nuclear weapons and
23 the cleanup of contaminated defense nuclear sites.
24 WIPP must be operated in accordance with DOE's
25 safety requirements and standards, and failure to do

1 so could result in exposure of the public and
2 workers to hazardous radiological materials.
3 In February 2014, two events -- a fire in
4 the underground involving a salt haul truck and a
5 separate release of radiological material from a
6 transuranic waste drum -- challenged whether DOE was
7 adequately meeting its safety requirements and
8 standards. The Board is providing independent
9 oversight of DOE's response and corrective actions
10 as a result of these events.
11 Today the Board will hold four sessions.
12 The first three sessions will be conducted as a
13 hearing with the Board convening three separate
14 panels of witnesses to discuss the safety issues
15 related to these accidents. The fourth session will
16 be conducted as a meeting of the Board with input
17 from Board staff and the public. The witnesses
18 during the first three sessions include senior
19 managers from DOE's Office of Environmental
20 Management, DOE's Carlsbad Field Office, and the
21 WIPP contractor, Nuclear Waste Partnership, LLC.
22 The Board will receive testimony regarding
23 actions taken following these two accidents to
24 safely recover the WIPP underground and implement
25 corrective actions in multiple programs to safely

1 resume and sustain waste operations. The Board will
2 then hear testimony from its staff concerning
3 actions taken by the Board before and after the two
4 accidents, and ongoing Board staff oversight
5 activities.
6 After the conclusion of this hearing, the
7 Board will convene a meeting of the Board itself.
8 In that meeting, the Board's deliberation will focus
9 on the Board's planned oversight of WIPP recovery
10 actions. The public will then be given an
11 opportunity to comment during these deliberations
12 also.
13 This concludes my opening remarks. I will
14 now turn to the other Board members for their
15 opening remarks. Mr. Sullivan.
16 MR. SULLIVAN: No remarks at this time.
17 VICE CHAIRMAN ROBERSON: Thank you,
18 Mr. Sullivan.
19 Mr. Santos?
20 MR. SANTOS: Thank you, Madam Vice
21 Chairman. My name is Daniel Santos and I started
22 with the Board back in December of last year. Since
23 then, I have been visiting the various sites across
24 the Department of Energy defense nuclear complex to
25 gain a better understanding of their mission and

1 also the independent oversight role we perform
2 collectively as a defense board.
3 I would like to note that my visit back in
4 March to the Waste Isolation Pilot Plant was a
5 priority to me, and was also recommended to me by
6 the Board staff due to its importance. I have been
7 to the underground. I have met with the workers.
8 And I even also had an opportunity to participate in
9 one of the many frequent town hall meetings on the
10 topic of WIPP here in Carlsbad, New Mexico.
11 Throughout my various trips, I have
12 learned to appreciate and understand the role and
13 importance of WIPP to the entire and overall defense
14 nuclear complex. And I have also witnessed the
15 impact the events of February 2014 had not only on
16 the mission of WIPP but also across various other
17 sites. Therefore, I look forward to today's hearing
18 to listen and to learn to the Department of Energy
19 so I can get a better understanding of how they plan
20 to use this opportunity of these events to
21 strengthen, improve, and sustain long-term safe
22 operation of the Waste Isolation Pilot Plant.
23 Before I conclude my remarks, I would like
24 to first thank the people of Carlsbad, New Mexico,
25 and their officials for hosting us here today and

1 giving us the opportunity to have this public
2 hearing.
3 I would also like to thank the invited
4 panelists and distinguished officials for their
5 willingness to appear, participate, and share
6 information not only with the public but also with
7 the Board. Special thanks to the Department of
8 Energy Carlsbad Field Office and their workers, the
9 Nuclear Waste Partnership and especially the workers
10 at the facility for giving me what I consider to be
11 a very informative, comprehensive, and most
12 importantly, safe visit back in March.
13 And finally, I want to thank the Board
14 staff, and all the people that provided support,
15 both directly and indirectly, to making this public
16 hearing. I appreciate and have witnessed the amount
17 of work and attention to detail necessary to put
18 this event together, and I want to thank you.
19 Madam Vice Chairman, this concludes my
20 opening remarks.
21 VICE CHAIRMAN ROBERSON: Thank you,
22 Mr. Santos. At this time I would like to begin
23 Session 1 by inviting Mr. Mark Whitney, DOE Acting
24 Assistant Secretary for Environmental Management, to
25 the witness table to provide a statement on behalf

1 of DOE.
2 Good afternoon, sir.
3 MR. WHITNEY: Good afternoon, ma'am.
4 VICE CHAIRMAN ROBERSON: Wonderful. I
5 know you have a statement you plan to make. If you
6 would like to submit additional written testimony
7 for the record, please do so at this time. And
8 we're ready to hear your statement.
9 MR. WHITNEY: Thank you. Good afternoon
10 and thank you, Vice Chairman Roberson and
11 distinguished members, Mr. Santos and Mr. Sullivan,
12 the Defense Nuclear Facility Safety Board. I very
13 much appreciate the opportunity to be here today to
14 share our commitment and vision on the critically
15 important topic of DOE's ongoing Waste Isolation
16 Pilot Plant, otherwise known as WIPP, recovery and
17 safety improvement efforts.
18 On behalf of the Department, I'm here
19 representing Secretary of Energy Moniz, Deputy
20 Secretary Sherwood-Randall, and the Office of
21 Environmental Management. I have great respect and
22 appreciation for the role of the Board in carrying
23 out its important responsibilities. I believe we
24 share a common goal of protecting the workers, the
25 public, and the environment, and I appreciate the

1 opportunity to be here today to discuss the
2 important progress we are currently making in
3 recovering the Waste Isolation Pilot Plant.
4 First, let me state that safe performance
5 of our work is our overriding priority. It has been
6 my commitment, and has also been stated by the
7 Secretary of Energy, and it will not be compromised
8 by schedule pressures. This is the clear
9 expectation behind every decision and activity we
10 undertake in our WIPP recovery efforts. We look
11 forward to continuing to foster a constructive and
12 collaborative relationship between EM and the Board,
13 and with the goal being of maintaining safe
14 operations at our defense nuclear facilities while
15 meeting our critical cleanup mission.
16 Safety has been a core value and an
17 integral part of EM's vital mission from its
18 inception. Our goal is to continuously improve on
19 the performance and operations in the spirit of
20 integrated safety management. Reflecting on the
21 definition of safety culture, it is an
22 organization's values and behaviors modeled by its
23 leaders and internalized by its members that serve
24 to make the safe performance of work the overriding
25 priority for the workers, public, and the

1 environment. It is imperative to our recovery
2 efforts and this starts with behaviors modeled by
3 our managers at headquarters and in the field, both
4 federal and contractor. I continue to set the
5 expectation for the EM work force that safety is
6 integral in the accomplishment of our mission.
7 The Board will hear more this afternoon
8 and early this evening from Session 2 panelists,
9 initially this afternoon Mr. Hutton, Mr. Franco,
10 Mr. Dunagan, Mr. McQuinn, and Mr. Blankenhorn, who
11 will present testimony to the specific actions
12 necessary to safely recover the underground, actions
13 taken and planned to address the indicative safety
14 elements in WIPP recovery, including specific
15 compensatory measures and controls to mitigate
16 risks, fixes to the safety basis and our safety
17 basis strategy, contractor assurance and the federal
18 strategy to provide adequate oversight. While I
19 will not be participating separately in Session 3,
20 my expectations will be represented by those members
21 of my senior leadership team who will be providing
22 testimony.
23 I recognize there continues to be a
24 perception among some of the work force that
25 schedule pressures are taking precedent over safety.

1 I take this concern very seriously and continue to
2 make clear to my management team and our work force
3 that safety is the overriding priority. We will not
4 let schedule pressures override the safe recovery of
5 WIPP and the safety of our workers, public, and the
6 environment.
7 We have made considerable progress toward
8 safely recovering WIPP over the past 13 months.
9 This includes immediate response to the incidents,
10 evaluation, and investigation into these events,
11 defining and implementing required corrective
12 actions, and that's specific to the first two
13 accident investigation reports and, of course,
14 issuing the high-level WIPP recovery plan and a
15 detailed baseline September of this past year.
16 The Department has a target to resume
17 waste emplacement operations in the first quarter of
18 2016, but we will only resume operations when it is
19 safe to do so. This means properly establishing the
20 safety management programs and upgrading the
21 documented safety analysis to the latest DOE
22 standard, as well as developing a corrective action
23 plan to address the Accident Investigation Board
24 phase 2 report. Should at any time during the
25 course of developing and implementing these

1 important program improvements we need to make
2 schedule adjustments, we will do so. Strengthening
3 safety management programs is among the highest
4 priorities within the Department and of great
5 importance, of course, to the Secretary and me and
6 that we do what we must to ensure that the events of
7 February 2014 do not happen again.
8 The AIB identified a number of weaknesses
9 in the safety basis and safety management programs
10 at WIPP that must be thoroughly addressed.
11 Headquarters, the Carlsbad Field Office, and Nuclear
12 Waste Partnership are implementing broad corrective
13 actions to strengthen WIPP's nuclear safety, fire
14 protection, emergency management, radiological and
15 maintenance programs. We are methodically working
16 through re-establishing a bounding safety envelope,
17 rigorously implementing training on new procedures
18 and processes, and responding to all our oversight
19 organizations' concerns. This includes the
20 New Mexico Environment Department, the Environmental
21 Protection Agency, of course the Defense Nuclear
22 Facilities Safety Board, the Mine Safety and Health
23 Administration, and the Office of Enterprise
24 Assessment.
25 We are currently working on corrective

1 action plans in response to the accident
2 investigation phase 2 report on the radiological
3 release. We are in the process of upgrading the
4 WIPP documented safety analysis to the DOE standard
5 3009-2014 that was issued last fall. When these
6 programs, procedures, and safety bases are in place
7 and the workers have been properly trained, we will
8 then conduct a comprehensive review of operational
9 readiness. This will include a formal operational
10 readiness review at both the contractor and the
11 federal levels, and this will ensure that we are
12 prepared to safely restart operations.
13 Underground entries which were necessarily
14 so painstaking in the weeks following the
15 radiological event now are safely performed on a
16 daily basis, and we have been working multi-shift
17 operations in the underground since February.
18 Restoration includes radiological surveys,
19 radiological buffers in noncontaminated areas,
20 ground control stability, roof bolting and equipment
21 maintenance. Today over 1,800 bolts have been
22 installed in the underground. We are finishing the
23 cleaning of electrical equipment from smoke damage
24 and we're about 75 percent on that activity.
25 Restoration and maintenance of required

1 equipment is also ongoing. The waste hoist was
2 returned to service in November, allowing more
3 personnel, larger equipment and materials to be
4 transported into the underground.
5 As an element of the formal accident
6 investigation we undertook Project Reach to perform
7 a comprehensive video inspection of panel 7, room 7.
8 Aerial videos over the waste stacks as well as
9 between the waste stacks were taken and completed in
10 January. Photographic and video examination found
11 no other breached drums. Successful completion of
12 Project Reach allowed for the issuance of the final
13 AIB report just recently, as well as a Technical
14 Assessment Team report. This was a critical step in
15 continuing our recovery operations.
16 Work is being performed in contaminated
17 areas. The decontamination approach for the walls
18 is to apply a water mist to create a crust on the
19 salt surfaces followed by a spray-on fixative for
20 areas of higher activity.
21 We are in the process of preparing floor
22 areas in the underground leading to panel 7. As you
23 know, adequate ventilation is required for life
24 sustainability, removal of dust during mining and
25 removing exhaust fumes during diesel engine

1 operations. Increasing ventilation capacity is a
2 principal requirement for safe underground
3 operations. Additional ventilation is necessary
4 because the facility is now, as it has been since
5 the incidents, operating in high-efficiency
6 particulate air filtration mode at a reduced airflow
7 of approximately 60,000 cubic feet per minute,
8 which, of course, greatly limits the activities that
9 we can execute underground.
10 Our plan is to increase ventilation in
11 three phases to support increased underground
12 operations and subsequent testimony later today will
13 provide additional details on those activities.
14 The initial closure of panel 6 and panel
15 7, room 7, the underground areas containing the
16 nitrate salt drums, is, of course, a priority for us
17 and the New Mexico Environment Department, and this
18 is needed in order to permanently isolate the
19 suspect waste stream.
20 WIPP received an order from the State to
21 perform expedited closure of these areas. Required
22 activities include contaminated bolting,
23 construction of bulkheads, and movement of salt for
24 panel 6. The initial closure for the entrance side
25 of panel 6 was completed on April 4. We are working

1 toward completing initial closure of panel 6 and
2 panel 7, room 7, by early summer.
3 To complement the AIB investigation, the
4 Department tasked a Technical Assessment Team to
5 determine the mechanisms and chemical reactions that
6 may have resulted in the failure of the waste drum.
7 The Technical Assessment Team was led by the
8 Savannah River National Laboratory and was composed
9 of scientists from Savannah River National
10 Laboratory, as well as Lawrence Livermore National
11 Laboratory, Oak Ridge National Laboratory, Pacific
12 Northwest National Laboratory, Sandia National
13 Laboratory, and Idaho National Laboratory. It was
14 truly a multi-laboratory team making up the
15 Technical Assessment Team, and included scientific
16 experts in a range of fields including sampling
17 analysis, forensic science, modeling and reaction
18 chemistry.
19 This team approach ensured that the
20 appropriate expertise was available to assess the
21 event and to support DOE's implementation of WIPP
22 recovery. The participation of many scientists
23 enabled the generation and peer review of
24 scientifically-based conclusions. The Technical
25 Assessment Team maintained independent authority to

1 direct all activities within its charter. The
2 Technical Assessment Team visited Carlsbad and met
3 with federal and contractor staff at WIPP, the
4 Carlsbad mayor's independent task force and attended
5 a special Carlsbad Town Hall meeting to answer
6 questions on the final report that was released on
7 March 26. They were able to make some key
8 determinations, including the contents of the drum
9 involved were chemically incompatible; the drum
10 breached as a result of internal chemical reactions
11 that produced heat and gas buildup, and drum 68660
12 was the source of the radiological release in the
13 WIPP underground. The results of the Technical
14 Assessment Team will provide useful lessons learned
15 and tools as WIPP continues to move forward toward
16 resuming operations at the facility.
17 These findings, coupled with the results
18 of the recently completed phase 2 of the accident
19 investigation lend support to the need and
20 appropriateness of moving forward with panel
21 closure, and that is the approach that we are
22 taking.
23 The Accident Investigation Board's three
24 reports evaluated in detail the salt truck fire and
25 radiological events. The AIB identified weaknesses

1 with the site office and headquarters in conducting
2 effective line management oversight and holding
3 personnel accountable for correcting repeated
4 issues. The AIB also identified weaknesses in the
5 execution of the Nuclear Waste Partnership
6 contractor assurance system, which did not identify
7 precursors to these events.
8 On April 16, the AIB phase 2 report was
9 released with 40 judgments of need. The AIB
10 completed an exhaustive investigation at WIPP, as
11 well as at Los Alamos National Laboratory, to
12 examine the cause of the radiological release at
13 WIPP and identify judgments of need regarding
14 managerial controls and safety measures necessary to
15 prevent or minimize the probability or severity of a
16 recurrence of this type of accident.
17 Based on post-event chemical,
18 radiological, and fire forensic analyses, the AIB
19 concluded that the release was caused by an
20 exothermic reaction involving a mixture of organic
21 materials and nitrate salts in one drum that was
22 processed at Los Alamos National Laboratory in
23 December of 2013. The board also concluded that an
24 underground salt haul truck fire that occurred at
25 WIPP on February 5, 2014, did not cause or

1 contribute to the radiological release event. The
2 AIB's findings identified shortcomings within both
3 contractor and federal processes at LANL, WIPP,
4 Environmental Management, and the National Nuclear
5 Security Administration. I understand that Mr. Ted
6 Wyka, the AIB chair, briefed you recently on the
7 results of the accident investigation and will
8 further be discussing individual aspects of these
9 investigations in more detail during Session 3
10 today.
11 I said previously that our goal is to
12 continuously improve our safety performance and
13 operations in the spirit of integrated safety
14 management. The integrated safety management system
15 is the Department's enduring framework for the
16 approach to the safe performance of work. The
17 integrated safety management's guide, attachment 10,
18 safety focus errors and associated attributes,
19 outlines our vision for what a positive safety
20 culture and a safety-conscious work environment
21 looks like and feels like, providing specific
22 attributes of leadership, employee engagement, and
23 organizational learning. These are not just words.
24 They are values and expectations that the Secretary
25 and I expect to be demonstrated on a daily basis.

1 In summary, WIPP is an important national
2 resource that will recover from this unfortunate
3 incident. WIPP will resume disposal operations when
4 it is safe to do so. The safety of our employees,
5 the public, and the environment is first and
6 foremost. We have kept the community and a wide
7 range of stakeholders informed along the way of WIPP
8 recovery, and will continue to do so. We will
9 continue working with our regulators and
10 stakeholders around the country as we move toward
11 resumption of the safe operations at WIPP.
12 As always, I invite you to contact me
13 directly if you ever have any concerns about our
14 activities involving WIPP recovery or our other
15 facilities, and thank you again for the opportunity
16 to discuss the Department's efforts. I'll now be
17 happy to answer any questions.
18 VICE CHAIRMAN ROBERSON: Thank you, Mr.
19 Whitney.
20 (A discussion was held off the record.)
21 VICE CHAIRMAN ROBERSON: Thank you, sir.
22 And once again, thank you, Mr. Whitney, for your
23 statement. Actually, I'm going to start out with
24 the first question and then we'll let the other
25 people chime in.

1 The Accident Investigation Boards,
2 multiple -- I guess it was the same core set of
3 people, but added and expanded for expertise -- the
4 boards for the salt haul truck fire and the
5 radiological release event identified a number of
6 deficiencies with the safety basis and safety
7 management programs relied on, relied upon at WIPP
8 to protect the workers and members of the public
9 from radiological hazards, and you talked a bit
10 about this in your statement.
11 They also identify concerns with the
12 contractor and federal organizations managing,
13 executing, and overseeing the safety of nuclear
14 operations.
15 During today's hearing we're going to
16 explore with your staff and with your contractor
17 actions taken and plans to correct the number of
18 deficiencies identified. But what specifically -- I
19 mean, you're in charge of this enterprise, not just
20 WIPP, but the entire complex that is now also unable
21 to benefit from the operation at WIPP. What
22 specific lessons learned are you taking away from
23 this event and, in particular, how are you
24 incorporating them into your expectations for
25 managing and overseeing the safety of operations at

1 WIPP?
2 MR. WHITNEY: Thank you, Ms. Roberson.
3 You hit on it. Oversight, an effective oversight,
4 is a recurring theme throughout the AIB reports and
5 it was highlighted extensively in the phase 2 report
6 that was just released. And so we have set out on a
7 course to strengthen our oversight through many
8 different mechanisms. And you also, I think
9 correctly, alluded to the fact that this is not just
10 a WIPP issue. This is something that we do need to
11 apply across the complex.
12 But let me start by talking about Carlsbad
13 first, and what we have done there.
14 VICE CHAIRMAN ROBERSON: Okay.
15 MR. WHITNEY: Of course, we have developed
16 corrective action plans for the first two AIB
17 reports, and are in the process of developing a
18 corrective action plan for the third and final
19 report, and those are very detailed. And the
20 reports -- I think the team did an excellent job
21 identifying the deficiencies and weaknesses, where
22 they are, as well as the judgments of need, in
23 giving us a path forward to resolving this.
24 So with Carlsbad, the oversight, we
25 approach it kind of in a multipronged way. One,

1 resources was an issue. It did not have the
2 resources that they need, quite frankly, to do an
3 effective oversight job.
4 So shortly after the event, shortly after
5 I came on last summer, we authorized an additional
6 22 folks to work at CBFO, an additional 22 FTEs,
7 many of those in safety oversight functions,
8 including very senior folks in the organization;
9 also including facility representatives, nuclear
10 safety individuals.
11 Carlsbad also looked at their organization
12 and realized and found that not only was it
13 structured in a way that did not clearly delineate
14 the roles and responsibilities of the program and
15 the oversight, but also there were individuals
16 within the organization that were doing both roles.
17 So it wasn't just an organization that was with one
18 office doing this, but we had folks responsible for
19 both aspects.
20 So they reorganized, developed a plan for
21 reorganization, and created two divisions, one an
22 operations oversight division, and one a production
23 division. So trying to get the production and the
24 oversight separated so we could have some
25 independence on the oversight part.

1 They hired -- created a new assistant
2 manager position for that oversight role, who
3 reports directly to the CBFO manager.
4 Those were very initial and very important
5 first steps for the organization.
6 They are also revising basic implementing
7 procedures how they do things in the organization,
8 specifically with those things in mind. They have
9 revised a training and qualification program and
10 they are currently working on that now for the
11 individuals who have these areas under their
12 responsibility.
13 They're doing things like revising
14 position descriptions that make it clear if you have
15 oversight responsibilities, you will be held
16 accountable, and that's how your performance will be
17 judged.
18 EM headquarters, trying to get maybe more
19 broadly how we're applying this across the complex,
20 was also provided additional resources to EM 40.
21 (EM 50 would not help us in this, probably.) But EM
22 40, which is our deputy assistant secretary for
23 safety, security and quality programs. We've just
24 recently provided them some additional FTEs, many of
25 them in the safety oversight area, with an agreement

1 to re-evaluate if those are sufficient in the near
2 future, and so we will keep on that to make sure
3 that they're adequately staffed.
4 As the head of that office, the Deputy
5 Assistant Secretary Jim Hutton, has told me -- and
6 he'll probably talk a little bit about this today --
7 we need to make sure that our oversight blanket
8 spreads across the complex. And something else
9 he'll probably talk about is a specific program that
10 he is developing with that in mind.
11 VICE CHAIRMAN ROBERSON: So can I ask
12 you -- I think providing the resources absolutely
13 was critical. Do you think the expectations for
14 oversight emanating from headquarters out into the
15 field were clear, as well?
16 MR. WHITNEY: I think that the
17 expectations when they were developed, the
18 requirements, are clear, but we need to do a better
19 job of reinforcing those, never being complacent. I
20 think that's one thing that we've learned is
21 complacency is not an option in what we do. And so
22 we need to make sure that we are on that.
23 And I know the thing that Jim Hutton likes
24 to say is: Anxiety is a good thing in this area,
25 and anytime we feel confident that we have things

1 figured out, that's probably, you know, a problem.
2 So we need to continue to work on this.
3 VICE CHAIRMAN ROBERSON: I don't want to
4 hog all the time, so I'm actually going to let
5 Mr. Sullivan -- I think he has a question or two for
6 you, as well.
7 MR. SULLIVAN: Thank you.
8 Good afternoon, Mr. Whitney. The incident
9 back in February of last year, over a year later, as
10 best as we can tell, these were really two
11 completely separate accidents. Other than the
12 coincidence of time, there really was no
13 relationship between them; is that correct?
14 MR. WHITNEY: Yes. The AIB report did
15 find that the fire event did not impact or result in
16 the February 14th radiological release incident.
17 MR. SULLIVAN: So my question to you is:
18 I'm wondering, if we had only had one, would we be
19 where we are today? The fire accident, for example,
20 showed that there were many issues here, including
21 cultural issues, raised the question of whether the
22 work force and the oversight was treating this as a
23 mine and not a nuclear facility, and so that had
24 several significant issues.
25 From a nuclear perspective -- well, let me

1 go back to the fire. I mean, if I'm a worker and I
2 look at these two issues, that's probably the
3 scarier one. I mean, the workers -- their lives
4 were directly threatened by the smoke that they were
5 trying to avoid that day. Less scary for them would
6 be the radiation release event but probably has
7 greater wide-ranging implications for the
8 department, so there's a different set of things
9 there. And it's even more different because when
10 you go and find the real problem that instigated
11 that release, it wasn't here. That problem was
12 elsewhere, and not here with anybody who was doing
13 any work here at the site.
14 So again, I'm back to my question. It's a
15 long lead-in to my question.
16 What if we only had one? What if we had
17 only had the fire? Would we today be looking at the
18 safety basis and other issues that the rad release
19 has brought up? What if we had only had the rad
20 release? Would we be looking at the cultural-type
21 issues? You know, because the rad release didn't
22 originate here, would we have been looking at the
23 cultural-type issues?
24 Can you address whether or not this
25 coincidence in time has somehow multiplied the

1 effect of one accident greater, so that we're
2 greater than the sum of the two?
3 MR. WHITNEY: Yeah. Thank you,
4 Mr. Sullivan. And I cannot sit here and say that we
5 would be in the same place today with respect to our
6 actions moving forward in the area of, you know,
7 safety management programs, safety basis, what we're
8 doing with respect to oversight, because the AIB
9 reports they did have some different -- or not
10 identical findings and different judgments of need;
11 and so without the two events we wouldn't have had
12 the compilation of conclusions and judgments of
13 need. So I'm not going to say that we would be in
14 the exact same place, because that's clearly not the
15 case.
16 I do agree with you that the February 5th
17 incident was a very significant event, very
18 unfortunate event, and probably the greater of the
19 two with respect to risks to the worker. And so I
20 do feel that that event alone would have
21 necessitated the AIB that we had, the findings that
22 we had, which, on the other hand, even though they
23 weren't the exact same findings, there are some
24 findings -- many findings, actually -- that are very
25 similar with respect to safety management.

1 And so I think in many respects -- and
2 oversight. And in many respects, we would be, on
3 some of these broader issues that I think are
4 applicable to the entire complex, we would be in the
5 same position. But I can't say that we would be in
6 the exact same position that, you know, the
7 confluency, the coincidence of the timing of the two
8 events that has led us to the point we are today
9 with three different reports, very detailed reports
10 that I think have allowed us to outline the path
11 forward, not just to WIPP recovery, but to improving
12 the way we do things across the complex.
13 MR. SULLIVAN: Okay. So you know, I think
14 that the coincidence of time simply points up that
15 the work force here -- and by extension, the
16 public -- really deal with two different dangers,
17 and they're both dangers, as dangers tend to be.
18 First, they're in a mine. They're underground.
19 They're confined. They have to rely on elevators
20 and other systems to get them to the surface if
21 anything goes wrong. And secondly, they're dealing
22 with dangerous nuclear materials.
23 So the only way that this can be handled
24 safely -- and it can be handled safely, as we've
25 demonstrated in the past and I'm sure we'll

1 demonstrate again in the future -- is with a good
2 strong culture. Now, you talked about trying to
3 effect that through how you were reorganizing the
4 oversight. So can you tell us a little bit more
5 about what is being done here with respect to the
6 oversight provided by the Department of Energy so
7 that we can understand better where you're trying to
8 go in establishing the right culture here?
9 MR. WHITNEY: Thank you. Yes, and the
10 safety culture, of course, efforts that we're
11 undertaking, there are the broader efforts that have
12 been ongoing, and then there's specific efforts
13 related to WIPP, the Carlsbad Field Office, the
14 Nuclear Waste Partnership, as well. So let me start
15 with that and some of the things that are ongoing
16 here at the site.
17 One thing that has recently occurred --
18 and I think you're right. Safety culture -- let me
19 step back one minute, because you hit something I
20 think is very important.
21 You know, this mine has -- and it goes
22 back to complacency and where we are. I think part
23 of our success, you know, led to some complacency.
24 We have not had these issues at WIPP; it's been such
25 a stellar operating organization without incident of

1 significance for many, many years. And I want to
2 just -- the workers and the work force -- they work
3 hard, they do their job, and they're proud of what
4 they do. And so I in no way want to attribute any
5 blame to the work force.
6 You're right. The culture issues are
7 things that we have to address. It's something we
8 obviously have not fixed, that we need to continue
9 to fix, continue to work on. At the previous
10 hearing we talked more broadly about some of our
11 efforts in that regard.
12 Here just recently, in December, the
13 Nuclear Waste Partnership requested an assist visit
14 from industry, from experts in the industry, folks
15 from Nuclear Regulatory Commission, NASA, and
16 Department of Energy, others, made up an info assist
17 visit.
18 They came through and did a fairly
19 in-depth review of the safety culture here. And I
20 think now NWP and the site here are moving forward
21 with looking at those findings and recommendations
22 and ensuring that those are captured appropriately
23 and acted upon.
24 We are, of course, continuing and
25 re-emphasizing here at WIPP the efforts that we have

1 been undertaking with respect to safety-conscious
2 work environment and ensuring that training is
3 provided to all the work force. Just within the
4 last few months we trained an additional 44 folks
5 here onsite in safety-conscious work environment.
6 And safety culture sustainment planning is ongoing,
7 leading to a point where we will have developed a
8 complex-wide safety culture sustainment program.
9 We have received -- building off of some
10 of the self-assessments that were completed and some
11 of the independent reviews completed at our sites,
12 all of our sites developed safety culture
13 sustainment plans, issued those to us at
14 headquarters; we've done a review of those. We're
15 always coordinating and communicating with the sites
16 as we review to understand what's going on, and we
17 will very soon be issuing -- I'll be issuing an
18 approval of the plans or approval with conditions,
19 depending on the site. So that's another effort.
20 But to me, it does go back to complacency.
21 I don't want to sound like we have it all figured
22 out and that we are in the exact right place we need
23 to be with respect to safety culture. I can assure
24 you that we are treating it very seriously, and
25 safety is our priority in all that we do, and you'll

1 hear a lot about that today in how we're moving
2 forward here at the site with respect to the safety
3 basis and safety management programs, as well.
4 MR. SULLIVAN: And specifically,
5 separating within the field office, separating
6 programmatic responsibilities from oversight
7 responsibilities, you think that will successfully
8 contribute to the improvement here within the
9 culture?
10 MR. WHITNEY: I think within oversight
11 certainly, and I think that in itself will help with
12 the safety culture. But as you know, it will take a
13 variety of different things that we need to do, not
14 just here but across the complex, to continue to
15 improve the safety culture.
16 MR. SULLIVAN: Thank you.
17 MR. WHITNEY: Thank you, sir.
18 VICE CHAIRMAN ROBERSON: I just want to
19 follow up on that line of questioning before I turn
20 it over to Mr. Santos.
21 So the investigation board had five
22 concerns with CBFO that CBFO had allowed the safety
23 culture at WIPP to deteriorate, as evidenced by
24 worker feedback, and workers did not feel
25 comfortable identifying the last issues that might

1 adversely impact management direction, delay the
2 mission or otherwise affect cost and schedule.
3 So I kind of say, "Okay, that's CBFO."
4 But I would say, EM also has to look in the mirror
5 at itself, as well. So what is EM headquarters
6 doing to ensure a better safety culture at WIPP so
7 that you don't find yourself -- so we're talking
8 about recovery now. Other sites in your complex
9 have waste building up. I think EM headquarters has
10 a tremendous role to play here, and I guess I
11 just -- I understand you say you have increased your
12 staffing in your safety oversight organization. But
13 are there other principles or are there expectations
14 that would improve the oversight from headquarters,
15 as well, to ensure that there's a good safety
16 culture surrounding the site?
17 MR. WHITNEY: Yes, thank you. And because
18 it's related to this, I will add that, in addition
19 to the new hiring authorities, we have Jim Hutton's
20 office; and not just from headquarters, but from
21 across the complex, we've had folks on the ground
22 here in Carlsbad supporting Joe Franco and his team,
23 since very early on, for over a year now. Many
24 folks, nuclear safety experts, folks that are
25 recognized in the field with decades of experience

1 in working in the nuclear facilities. And that is,
2 of course, another effort that we're trying to do
3 from headquarters to effect that positive change
4 with respect to oversight.
5 And with respect to what additional things
6 that we're doing at WIPP, I personally participated,
7 I guess is the right way to say it, in the INPO
8 assist visit. I was interviewed by the folks and
9 provided comments, and then also, you know, had an
10 opportunity to read their findings and their
11 recommendations.
12 And you're right, you know. My
13 observation is part of it is that there is a
14 perception within the work force that we have
15 prioritized production over safety, quite frankly,
16 and specifically as it relates to WIPP recovery. So
17 that is an unintended consequence of trying to
18 resume operations. But I think a point that we miss
19 and haven't been as clear on as we should have
20 been -- because it is our strategy and our focus --
21 is resuming operations at WIPP, first and foremost,
22 involve establishing a safety envelope to resume
23 operations. That's our first priority. And so when
24 we talk about resuming WIPP operations and
25 recovering operations, we should be explicit.

1 That's what we're talking about. Everything else
2 will follow. And so we need to do a better job on
3 that.
4 VICE CHAIRMAN ROBERSON: Mr. Santos.
5 MR. SANTOS: Thank you, Madam Vice
6 Chairman, and good afternoon, Mr. Whitney.
7 Prior to the February 2014 events and even
8 after those events, there continues to be evidence
9 with some challenges and deficiencies identified by
10 multiple teams associated with work planning and
11 control, execution of procedures, the use of expert
12 judgment, all of that. Is this unique to this
13 facility? Do you also see this across the complex?
14 And what are some of the actions you may be taking
15 headquarters-wide?
16 MR. WHITNEY: I don't think it's unique to
17 WIPP, unfortunately. It's a constant battle. I
18 mean, these are, as you know, very complex
19 facilities and complex operations, in many cases,
20 with operations, procedures, and processes that, if
21 you put them all together, you know, could probably
22 fill this entire auditorium.
23 So it is a constant struggle and a
24 constant challenge to stay on top of that, to make
25 sure -- because things change. Our work changes.

1 We develop new work packages to advance to the next
2 stage of whatever cleanup we're doing at sites.
3 And so I would like to say that maybe it's
4 unique, but it's not unique. And it will be
5 something that we will continue to have to stay on
6 top of and continue to work. And you know, it is
7 a -- from my time at Oak Ridge, I know it is
8 something that we spend a lot of time on, working
9 with the contractor on these specific issues, work
10 planning control, work packages, because that's
11 where you get in trouble. And so you're right, but
12 it's not only at WIPP.
13 MR. SANTOS: My next question goes back to
14 oversight. How would you go about leveraging the
15 methodologies, the composition, or the unique aspect
16 of this Accident Investigation Board so you can
17 leverage across your oversight initiative such that
18 I don't need an accident or the composition of an
19 accident investigation board to come up with some of
20 the conclusions that may not even have to do with an
21 accident like they reported, and we can strengthen
22 the oversight?
23 MR. WHITNEY: Thanks, Mr. Santos. Yes,
24 and that is precisely -- you know, it would be easy
25 to want to focus on WIPP and focus on recovery,

1 focus on all the -- and Los Alamos -- on all the
2 findings in the AIB reports. But we have to apply
3 those findings across the complex. And they're
4 not -- even the things that are directly related to
5 TRU waste operations -- packaging, processing -- a
6 lot of those things are directly applicable to other
7 areas within the cleanup program.
8 And so what we have done is, for the first
9 two reports, of course, we issued those to the
10 field, to the field managers. We've had in-depth
11 conversations with the field managers about those,
12 seeking from them opportunities to -- lessons
13 learned that they may take away from those, and we
14 have continuously coming in, as we, you know, have
15 additional findings, things coming in from the
16 sites. We have a site manager who has detailed
17 exactly what they have done with respect to WIPP.
18 They don't have a repository, but they have an EM
19 program and they have taken lessons learned. Now,
20 many of them have the benefit of having folks that
21 served here at WIPP after the incidents to help with
22 recovery, to help with the AIB investigations, and
23 so forth. And so we have specific examples of that.
24 It's something that we continue to emphasize.
25 And then with this last AIB report, I

1 recently issued guidance to all the senior
2 leadership team, including, of course, all our site
3 managers, on what our path forward is with respect
4 to this. And so, one, the expectation is that they
5 not only read and review the report, but they talk
6 about it with the contractors, they talk about it
7 with their employees.
8 And then we are going to meet -- and Ted
9 Wyka will be briefing each site individually on the
10 findings within the next few weeks. And then in
11 early June we are going to reconvene the EM senior
12 leadership team specifically to look at this and
13 specifically to consider what lessons we may learn
14 and hear, you know, from some of the sites what
15 they're already looking at and applying.
16 Oak Ridge, for example, within the last
17 few weeks -- I received an e-mail from their site,
18 which outlined in great detail what they did to look
19 at the previous two reports and the lessons learned
20 they took from those and how they're moving forward
21 and developing their own corrective action plan to
22 ensure that they don't have issues that result from
23 some of the deficiencies that were found in the
24 report.
25 So we do want to move forward aggressively

1 on that, and that's my expectation, that we will.
2 MR. SANTOS: I have one last follow-up
3 question. And you touched briefly on operating
4 experience and how you plan to share complex-wide.
5 Any plans to share and evaluate lessons learned and
6 leverage from international experience, similar type
7 facilities or repositories?
8 MR. WHITNEY: You know, I think we do
9 that. And to be quite honest with you, I haven't
10 thought of it in terms of the AIB reports but just
11 what we can learn from other facilities. Actually,
12 one of our senior leadership team in the front
13 office just recently returned from UK, where she
14 visited the facilities, and she said she has a lot
15 of lessons to bring back that we can apply to some
16 of our facilities. And so I look forward to that.
17 So I think that's something that we do.
18 We don't do it a lot. We have challenges at home
19 that we're always trying to deal with. But it's
20 important, you're right, because there are a lot of
21 approaches that we may not have considered, and I
22 appreciate the value of that. I used to work on
23 international programs, including through EM, and
24 for NSA, and so I understand the value that that can
25 bring to a program.

1 MR. SANTOS: Thank you, Mr. Whitney.
2 Those are all my questions, Madam Chair.
3 VICE CHAIRMAN ROBERSON: Thank you,
4 Mr. Santos.
5 Mr. Sullivan?
6 MR. SULLIVAN: Thank you.
7 Mr. Whitney, I want to ask you
8 specifically about emergency response, so let's talk
9 about the rad release event in particular. While
10 the work force here didn't cause the event, as the
11 Accident Investigation Board phase 1 for that event
12 report indicates, there were plenty of deficiencies
13 in the response, the biggest one, in my view, being
14 timely notifications weren't made back to folks in
15 Washington, D.C., such as your predecessor, to
16 respond.
17 I found out about that event on Saturday.
18 And again, coincidence, we had a staff member here
19 who was observing the entry into the mine post fire,
20 and on Saturday morning that staff member came to
21 the site, was given access to the site, because he
22 was just coming back for that day's events. And
23 then several -- about 9:00 I think in the morning --
24 so this is now ten hours after the first indication
25 of a problem -- then they were told to shelter in

1 place. And so I found out about it because I had a
2 staff member here who then made phone calls back to
3 our agency to say that something was up. So I think
4 there were many breakdowns in letting the folks know
5 back in Washington, D.C.
6 So my question is: What's been done to
7 fix that problem? Whether there was an issue here
8 or somewhere else within the complex in the future,
9 I'm sure you want to know about it so you can get
10 the facts and begin to bring the expertise that you
11 have available to you to help affect the problem.
12 What are you doing to make sure that you're getting
13 proper notification?
14 MR. WHITNEY: Thank you, Mr. Sullivan. As
15 you noted, the first AIB report had a very large
16 part to deal with the response to the fire and as
17 well as the second report had a response to the
18 release. Neither of those were adequate, for sure.
19 The NWP and our offices here have revamped
20 the environmental -- emergency response programs,
21 processes, systems. That includes not only
22 equipment and systems, but also the way they do
23 that, including a notification. That is something
24 that we'll continue to work on moving forward. And
25 I know that folks that will participate in the later

1 sessions will have more in-depth detail on what has
2 been done.
3 MR. SULLIVAN: I have another question,
4 which I think will be quick, but I'm shifting topics
5 now. So DOE's Office of Enterprise Assessments, the
6 office run by Mr. Podonsky back in Washington --
7 they came out and did a post incident review of the
8 maintenance program and they issued a report in
9 December. The executive summary for the report says
10 they're going to do more such reviews, and I'll just
11 quote from it quickly. It says, "As the recovery in
12 transition to operational activities progress, the
13 EA's oversight will also include a comprehensive
14 review of WIPP's operations as requested by the
15 Acting Assistant Secretary for Environmental
16 Management," which is you.
17 So I guess my question to you is: What
18 are you planning to request to have them do?
19 MR. WHITNEY: Well, one thing that we
20 would like for them to do is take another view. I
21 think it's always good and I respect the work of
22 Glenn Podonsky's office. I think they do a very
23 thorough job, and they can generally find things
24 that we may not have found before. And so just
25 general operational "what happened with the events

1 and why they happened," they may have a different
2 angle, a different outlook that could provide us
3 some additional ways of looking forward.
4 So that's what I would like. And I think,
5 although sometimes I know that Joe and his team here
6 probably feel like they're getting a lot of reviews
7 and a lot of operational burden, I think they also
8 recognize the importance and the value of that
9 moving forward. When we do resume operations, we
10 need to be sure that we're ready to do so safely.
11 I will just touch on, since you mentioned
12 the maintenance in the first review that Enterprise
13 Assessments did, we did reach out to all of our
14 sites again as an attempt to take some of the
15 lessons learned from WIPP, particularly the fire
16 event, and apply that across the complex to direct
17 the sites to provide a report on deferred
18 maintenance, particularly focused on safety-related
19 systems.
20 What we found from that, from the input
21 that we received from the sites, was that generally
22 across the board, safety-significant systems were
23 well accounted for, well tracked, and well followed
24 through upon, any type of work that needed to be
25 done.

1 Safety-related systems, not so evenly
2 applied across the complex. And so that's something
3 that we're taking a very close look at right now in
4 the area of deferred maintenance to, one, ensure
5 that we're all accounting for it the same way, with
6 the same rigor; and two, making sure that we fund
7 those activities. The safety-significant systems
8 are funded within the operational funds that sites
9 receive. They don't need to request additional
10 funds. They know that. That is something -- the
11 expectation and responsibility is for them to fund
12 those systems and the maintenance on those systems.
13 But the safety-related systems -- and I
14 think we learned a very good lesson, unfortunately,
15 from the fire event on why that's so important. But
16 that's something we're going to be focusing on
17 moving forward.
18 MR. SULLIVAN: Okay. Just quickly on the
19 Enterprise Assessment's potential future reviews, is
20 there anything scheduled yet?
21 MR. WHITNEY: I believe that they are
22 conducting a review right now. Is that correct?
23 Okay. So the Board staff has the schedule
24 on that. But my understanding is right now, or
25 imminently, they're conducting a review.

1 MR. SULLIVAN: Thank you.
2 MR. WHITNEY: Yes, sir.
3 VICE CHAIRMAN ROBERSON: I guess just one
4 more question, because we're running out of time,
5 and maybe it's partly commentary, partly not.
6 I guess the two things that struck me from
7 all the investigations -- and I'd just kind of like
8 your straightforward reaction, whether it's here or
9 for the record. You know, one was: Changes over
10 time deteriorated really the understanding of the
11 status of your safety basis for the facility. And
12 the other was: I mean, this is a premier safety
13 operation, it had a tremendous safety record, it was
14 recognized not just nationally, internationally for
15 safety performance. And then we have a thing go
16 wrong and we find those foundational things
17 underneath don't really support the conclusion.
18 I think one of the terms that I hear from
19 leaders in the department these days is the
20 perception of what existed wasn't the reality. And
21 so when I look at EM headquarters, the investigation
22 revealed a whole host of things. We're going to
23 talk about a lot of those through the rest of the
24 day. But I just wanted to get to what's the key
25 takeaway for EM headquarters that will have an

1 effect on its oversight of WIPP going forward?
2 MR. WHITNEY: Thank you, Ms. Roberson.
3 You're exactly right on the first point. The
4 changes over time really deteriorated our
5 understanding of where we were with respect to
6 safety basis, and so that in itself is a very key
7 finding for us and allows us to move forward.
8 And so as we're developing the revisions
9 to the safety basis now, we are, one, using the most
10 recent standard as I mentioned, the 3009-2014, the
11 DOE's safety basis standard, which was revised just
12 late last year. And that has to be the priority for
13 us before we resume operations at WIPP, is
14 re-establishing the safety envelope and doing it
15 correctly.
16 And then to your point about the stellar
17 record and we thought we had it right before, and
18 the event happens, and you know, what's to prevent
19 maybe that from happening again?
20 You know, we clearly did not have it
21 right. And it gets back to I think my point earlier
22 that complacency, precisely because of the stellar
23 safety record, you know, kind of was our worst
24 enemy. And we can't get complacent. We have to
25 continue to focus, continue to maintain that anxiety

1 that my colleague talks about, and move forward and
2 focus on this issue.
3 VICE CHAIRMAN ROBERSON: Thank you,
4 Mr. Whitney.
5 Any other questions?
6 Thank you for your testimony. Thank you
7 for answering our questions. And you are free to
8 leave the witness table.
9 MR. WHITNEY: Thank you, Ms. Roberson.
10 VICE CHAIRMAN ROBERSON: We're going to
11 take a two-minute break so you don't ruffle things
12 as you leave and we can prepare for the next
13 session. Thank you.
14 MR. WHITNEY: Thank you.
15 (Recess from 1:02 p.m. to 1:14 p.m.)
16 SESSION 2
17 Panel Discussion: Actions Necessary to Safely
18 Recover the Underground Prior to Resumption of Waste
19 Handling Operations
20 VICE CHAIRMAN ROBERSON: All right. We're
21 reconvening. Let's get this show back on the road.
22 Thank you so much for your patience. While we're
23 preparing to start Session 2, I want to acknowledge
24 the presence of Mayor Janway, who is circling the
25 aisle. Thank you, Mayor, for coming. We look

1 forward to any contribution you have to make today.
2 Thank you.
3 So at this time, I'd like to begin Session
4 2 of the hearing, which will focus on DOE's actions
5 necessary to safely recover the WIPP underground
6 prior to resuming waste-handling operations. During
7 this session, the Board will explore actions planned
8 and taken by DOE to address the key safety elements
9 in the WIPP recovery plan and how compensatory
10 controls implemented under temporary safety basis
11 documents and safety management programs will
12 protect the workers and the public during recovery
13 activities.
14 The Board will also address DOE's strategy
15 for providing adequate federal oversight during the
16 recovery phase.
17 I'd like to start this session by
18 introducing Mr. Carter Shuffler, who is the
19 technical staff lead for overseeing the safety of
20 recovery activities at WIPP for the Board, and a
21 member of the Board's Nuclear Materials Processing
22 and Stabilization Team. Mr. Shuffler will provide
23 testimony from the Board staff.
24 MR. SHUFFLER: Good afternoon, Madam Vice
25 Chairman and members of the Board. For the record,

1 my name is Carter Shuffler. I am a member of the
2 Board's technical staff responsible for overseeing
3 the safety of nuclear operations at the Waste
4 Isolation Pilot Plant, or the WIPP site.
5 In this statement I'll provide a brief
6 overview of the Board's oversight activities at WIPP
7 before and immediately after the salt haul truck
8 fire and radiological release event in February
9 2014. I'll discuss the findings of DOE's Accident
10 Investigation Board related to these events and the
11 corrective actions proposed by DOE and its
12 contractor, Nuclear Waste Partnership, or NWP, to
13 address these findings. I will then discuss DOE's
14 recovery plan for resuming waste operations at the
15 site. And finally, I will discuss the staff's
16 recent oversight activities at WIPP and highlight
17 lessons learned from the February 2014 events that
18 the staff is factoring into its future oversight at
19 WIPP and other DOE defense nuclear facilities.
20 WIPP is a deep geologic repository for
21 permanent disposal of transuranic, or TRU, waste
22 generated as a byproduct of defense nuclear
23 activities across the nuclear weapons complex.
24 Deliberate, safe disposal of these wastes, which
25 contain long-lived radioactive isotopes, is crucial

1 to ensure the safety of the public, facility
2 workers, and environment surrounding the WIPP site.
3 Permanent disposal of TRU waste also improves the
4 safety posture at generator sites such as the Idaho,
5 Lawrence Livermore, Los Alamos, and Oak Ridge
6 National Laboratories and the Hanford and Savannah
7 River Sites.
8 NWP manages and operates the WIPP site
9 under contract to the Department of Energy. The
10 Department of Energy representatives, including
11 personnel located at the Carlsbad Field Office, have
12 the responsibilities for WIPP contract oversight and
13 regulation.
14 The Board and their staff conduct
15 oversight of defense nuclear facilities across the
16 Department of Energy complex, including operations
17 at the WIPP site. The Board's oversight consisted
18 mostly of monitoring and reporting on operations at
19 WIPP through 2009. The following year, after an
20 onsite review identified safety issues with work
21 planning and control, the Board began a more
22 aggressive oversight approach that resulted in a
23 series of communications to DOE, and in an October
24 2010 letter to DOE, the Board identified weaknesses
25 in the implementation of integrated safety

1 management at WIPP during activity level work
2 planning and control. These weaknesses resulted in
3 procedures that did not contain necessary controls
4 and could not be performed as written.
5 In June 2011, after reviewing the WIPP
6 fire protection program, the Board identified
7 deficiencies with the WIPP fire hazard analysis,
8 highlighting its failure to adequately address all
9 fire hazards in the underground.
10 Finally, in a June 2012 letter to DOE, the
11 Board identified weaknesses in the WIPP maintenance
12 program, including poor-quality procedures that
13 rendered many work control documents unable to be
14 performed as written, or inaccurate. Many of the
15 safety issues identified in these letters are
16 similar to the recent findings of DOE's Accident
17 Investigation Board that I will discuss later in
18 this testimony.
19 In February 2014, two significant events
20 occurred at the WIPP site. On February 5th, the
21 fire associated with a salt haul truck occurred in
22 the underground, requiring an evacuation.
23 Eighty-six workers in the underground were evacuated
24 during this event. Six workers were subsequently
25 treated for smoke inhalation at Carlsbad Medical

1 Center, and seven workers were treated onsite.
2 DOE initiated an Accident Investigation
3 Board and began deploying team members to the WIPP
4 site within a few days after the fire event.
5 On February 14th, a radiological material
6 release event initiated from one or more TRU waste
7 containers located in panel 7 in the WIPP
8 underground. A continuous air monitor detected the
9 release and provided an interlock signal to switch
10 from normal, unfiltered ventilation flow to filtered
11 ventilation flow, which directs air from the
12 underground through high-efficiency filters. The
13 event started at approximately 11:15 p.m. at night
14 and no workers were in the underground.
15 The high-efficiency filters significantly
16 reduced the release of radioactive material but did
17 not fully mitigate the event, in part due to leakage
18 through two bypass dampers. Twenty-one individuals
19 subsequently tested positive for low levels of
20 internal contamination and small quantities of
21 plutonium and americium were identified offsite.
22 On the day after the fire event, February
23 6th, 2014, the Board deployed a senior staff member
24 stationed at the Los Alamos National Laboratory to
25 the WIPP site. The Board subsequently deployed a

1 senior fire protection engineer from our Washington,
2 D.C., office. These individuals were initially
3 focused on oversight and observation of the fire
4 response, investigation, and recovery activities,
5 including walkdowns of the fire scene in the WIPP
6 underground along with members from DOE's Accident
7 Investigation Board.
8 The Board's representatives reported to
9 the WIPP site on the morning of February 15th, 2014,
10 along with members from DOE's Accident Investigation
11 Board and other DOE and WIPP employees unaware of
12 the radiological release. As information was
13 revealed concerning the radioactive material release
14 event, the Board's representatives maintained an
15 oversight role and communicated with senior DOE and
16 NWP officials. The Board's field representatives
17 provided the latest real-time information to the
18 Board and their staff, interfaced with senior WIPP,
19 DOE, and contractor personnel on safety issues,
20 observed response and recovery actions, and
21 conducted field walkdowns of facility conditions.
22 The Board's staff in Washington, D.C.,
23 organized a support team consisting of staff experts
24 in safety, emergency management, fire protection,
25 ventilation, radiological controls, and other areas.

1 This team provided real-time support to the field
2 representatives to ensure the best knowledge was
3 being applied and communicated during and following
4 the events.
5 Based on feedback from this team, the
6 Board communicated with the Secretary of Energy on
7 March 12th, 2014, on the important role the filtered
8 ventilation system was providing at WIPP to confine
9 radioactive material within the mine. The Board
10 advised that DOE thoroughly evaluate the safety
11 controls and contingency plans necessary to maintain
12 confinement to ensure adequate protection of the
13 workers and the public. The Board's field
14 representatives and staff closely followed
15 subsequent actions taken by DOE and NWP to ensure
16 the filtered ventilation system is maintained as a
17 highly reliable system.
18 Following the events in February, the
19 Board deployed additional field representatives and
20 subject matter experts to WIPP as warranted based on
21 DOE and NWP response and recovery activities. This
22 included a safety basis expert and health physicist.
23 The Board maintained full-time oversight coverage at
24 the WIPP site from February to early May 2014.
25 After that, the Board staff participated in daily

1 calls with WIPP personnel to continue following
2 investigation and recovery activities.
3 The Accident Investigation Board completed
4 its reviews of the salt haul truck fire and the
5 radiological release event phase 1 in March and
6 April of 2014. The investigation revealed
7 deficiencies in both the documented safety analysis
8 and safety management programs relied upon at WIPP
9 to protect the public and facility workers from
10 potential exposure to radiological materials. The
11 investigation board further identified weaknesses in
12 the contractor and federal organizations in
13 managing, executing, and overseeing the safety of
14 WIPP operations.
15 I'll address each of these briefly,
16 starting with the documented safety analysis.
17 DOE Standard 3009 provides guidance and
18 requirements for preparing a documented safety
19 analysis to meet federal nuclear safety
20 requirements. The Accident Investigation Board
21 identified several instances in which the WIPP
22 documented safety analysis was inconsistent with the
23 DOE standard, lacked conservatism, or contained
24 errors and omissions suggesting a lack of rigorous
25 contractor and federal reviews. In addition, the

1 accident last February revealed that the safety
2 controls at WIPP for waste operations may not be
3 adequate for some hazards and accident scenarios.
4 Continuing with safety management
5 programs, the February 2014 events revealed
6 weaknesses in important safety programs such as
7 emergency management, fire protection, and
8 maintenance. For example, in the area of emergency
9 management, workers and managers did not fully
10 comply with emergency response procedures, and
11 important decisions regarding accident response were
12 left to expert judgment rather than predefined
13 action plans. Training and drill programs were
14 ineffective in maintaining worker competence in
15 accident response, and the emergency management
16 organization was not structured in accordance with
17 DOE requirements. As a result, workers had
18 difficulty evacuating the underground during the
19 fire event. In addition, the site failed to
20 properly identify and initiate protective actions
21 during the radiological release.
22 In the area of fire protection, the
23 Accident Investigation Board concluded that the fire
24 hazard analysis did not identify all credible fire
25 scenarios in the underground. Fire protection

1 requirements promulgated by DOE and other regulatory
2 bodies, such as the Mine Safety and Health
3 Administration, were not consistently addressed in
4 program documents, and combustible materials in the
5 underground were routinely in excess of the loading
6 limits established by the program for fire safety.
7 These deficiencies increased the risk of a fire in
8 the WIPP underground and complicated efforts to
9 evacuate workers safely.
10 A disciplined maintenance program is
11 required to maintain the operational readiness of
12 critical equipment. In this area, the 2014 events
13 revealed a lack of rigor in the development and
14 implementation of WIPP's maintenance program. For
15 example, maintenance practices for equipment
16 deviated from vendor recommendations without a
17 technical justification, routine inspections did not
18 identify hazardous conditions such as the buildup of
19 combustible fluids on the salt haul trucks, and
20 instrument sensors were allowed to degrade in WIPP's
21 harsh salt environment.
22 Collectively these issues led the Accident
23 Investigation Board to conclude that NWP did not
24 have an effective contractor assurance system. A
25 healthy contractor assurance system is an important

1 part of DOE's oversight model for defense nuclear
2 facilities. This model relies in part on
3 contractors to self-identify and correct safety
4 issues. The investigation board further concluded
5 that DOE had not implemented effective line
6 management oversight of the contractor to identify
7 weaknesses in the contractor assurance system and
8 safety programs.
9 NWP and DOE developed formal corrective
10 action plans to address the findings of the Accident
11 Investigation Board. For example, DOE and NWP are
12 working on a major revision of the documented safety
13 analysis to correct deficiencies in this area.
14 Notably, DOE has committed to applying the 2014
15 revision of DOE Standard 3009 to the new DSA
16 revision. The revised standard contains
17 significantly improved safety requirements for
18 preparing a documented safety analysis. The staff
19 believes this commitment is a major step forward in
20 improving the safety posture at WIPP. DOE's action
21 is particularly commendable because it will be the
22 first application of the revised standard in the DOE
23 complex.
24 To correct the deficiencies in safety
25 management programs and the contractor assurance

1 system, NWP committed to improving program
2 documentation and procedures and conducting
3 additional training for the work force. NWP is
4 planning reviews in the future to evaluate the
5 effectiveness of these corrective actions. To
6 improve oversight of the contractor, DOE similarly
7 committed to revising oversight programs and
8 providing additional training for employees.
9 Notably, after the February 2014 events, DOE
10 reorganized the Carlsbad Field Office by creating a
11 separate Office of Operations Oversight. This
12 office segregates operations, safety, engineering,
13 and environmental oversight from programmatic
14 production activities, thus enhancing oversight
15 independence. DOE has been challenged to fill
16 vacancies in the new organization, including
17 management positions responsible for safety
18 oversight. DOE is aware of the staffing problem and
19 pursuing options to attract and retain a
20 high-quality federal work force at WIPP.
21 While DOE and the contractor are
22 aggressively working on corrective actions, in most
23 cases it is too early to judge their adequacy. The
24 staff believes, however, that the corrective action
25 plan and commitments provide an adequate framework

1 for improving safety of operations at the WIPP site.
2 In the interim, while corrective actions
3 are underway, DOE and the contractor are working to
4 recover the underground and prepare for the
5 resumption of waste operations. Activities at WIPP
6 today are focused on restoring the stability of the
7 mine, conducting cleanup and maintenance activities,
8 decontamination, and closing open storage panels as
9 directed by the New Mexico Environment Department.
10 Since the radiological release, the
11 airflow through the underground has been exhausted
12 through high-efficiency filters. While necessary to
13 prevent potential radiological releases to the
14 environment, the filtered ventilation system does
15 not provide sufficient air flow to support all
16 recovery activities or planned waste operations. To
17 support these activities, NWP is pursuing the
18 installation of additional filtered and unfiltered
19 ventilation flow for the contaminated and
20 uncontaminated portions of the underground
21 respectively. The additional filtered flow will be
22 provided by the interim ventilation system. The
23 additional unfiltered flow will be provided by the
24 supplementary ventilation system. Those systems are
25 planned for installation this year.

1 To compensate for the identified
2 deficiencies in the WIPP safety basis, DOE is
3 authorizing recovery activities in the underground,
4 including the installation and operation of the
5 interim ventilation system through a series of
6 temporary safety basis documents called Evaluations
7 of the Safety of the Situation, or ESSs. These ESSs
8 identify the hazards associated with specific
9 recovery activities and the safety controls to
10 protect the workers and the public. While providing
11 the necessary safety basis coverage in accordance
12 with DOE's nuclear safety requirements, ESSs are not
13 a long-term solution for a deficient documented
14 safety analysis. A rigorous documented safety
15 analysis that complies with DOE standards is the
16 only acceptable safety basis solution for WIPP.
17 The staff has continued providing
18 oversight of DOE's recovery activities at WIPP and
19 the development of a revised document safety
20 analysis. For example, the staff observed a
21 workshop last month in Carlsbad during which DOE and
22 NWP discussed expectations and plans for
23 implementing the new revision of DOE standard 3009.
24 The staff has also provided oversight of
25 improvements to safety management programs such as

1 emergency preparedness and response. Last December
2 the staff observed the site's annual site-wide
3 emergency exercise, the first activity conducted
4 under a reorganized incident command structure. The
5 staff has also observed bi-monthly emergency drills
6 for maintaining worker response proficiency.
7 Finally, the staff has performed focused reviews on
8 the interim ventilation system. While this system
9 is not being designed and procured as a credited
10 safety system, the staff understands that it is
11 DOE's intent to rely upon it as a credited safety
12 system in the documented safety analysis revision.
13 The staff's reviews have therefore focused on
14 understanding the safety, design, and quality
15 requirements applied to the system and the potential
16 gaps that DOE may need to address when the system is
17 upgraded to a credited safety control in the
18 documented safety analysis revision.
19 An additional recent staff activity was to
20 examine the Board's historical approach to oversight
21 at WIPP in light of the February 2014 events and to
22 identify lessons learned for future oversight
23 activities. The staff then developed a corrective
24 action plan to address these lessons learned. The
25 lessons learned highlighted several areas needing

1 improvement in staff oversight processes. Of note,
2 the absence of a site representative at WIPP
3 diminished our ability to observe WIPP operations
4 closely and to detect negative trends that could
5 result in unsafe conditions. Expectations for
6 additional oversight at DOE sites without a site
7 representative were not clearly established.
8 Follow-up review activities with DOE to track
9 identified safety issues to closure needed
10 improvement. This was consistent with a finding of
11 the Accident Investigation Board that deficiencies
12 identified by external agencies such as the DNFSB
13 were allowed to remained unresolved for extended
14 periods of time. Finally, oversight activities at
15 WIPP were deemphasized for the better part of the
16 decade following the start of waste operations at
17 WIPP in 1999. The reasons for this lack of emphasis
18 were unclear, but are likely related to the Board's
19 limited staffing resources and the relative risk
20 posed by WIPP operations in comparison with other
21 hazardous DOE defense nuclear facilities.
22 The staff is implementing corrective
23 actions to address these improvement areas. For
24 example, the staff is maintaining an increased
25 presence at DOE sites without a site representative,

1 including WIPP. Technical staff management is
2 deploying headquarters staff, many with field
3 experience as site representatives and qualified for
4 unescorted underground access, to conduct periodic
5 oversight at WIPP on a rotating basis. The
6 headquarters staff has also continued the regular
7 status calls with WIPP personnel that began after
8 the accidents to maintain cognizance of recovery
9 activities and to discuss emerging safety concerns.
10 Other lessons learned, such as the lack of
11 historical oversight emphasis at WIPP and poor
12 followup on identified safety issues are being
13 addressed as part of a larger agency effort to
14 improve technical staff internal controls. This
15 effort was underway at the time of the February 2014
16 accidents. As part of this initiative, formal
17 expectations for site-cognizant engineers
18 responsible for oversight at DOE sites without a
19 site representative are being established. Formal
20 processes for prioritizing safety reviews, tracking
21 safety issues to closure, and elevating languishing
22 issues for further action are also now in place.
23 The outcomes of the staff's lessons
24 learned analysis and the revised oversight approach
25 codified in our new control system is forming the

1 basis for the staff's future work plans and
2 oversight activities at WIPP. Mr. John Pasko, the
3 Nuclear Materials Processing and Stabilization Group
4 Lead, will elaborate more on our future plans for
5 providing oversight at WIPP during the public
6 meeting portion of this proceeding.
7 This concludes my prepared testimony. I'd
8 be happy to answer any questions from the Board.
9 VICE CHAIRMAN ROBERSON: Mr. Sullivan, do
10 you have any questions for Mr. Shuffler?
11 MR. SULLIVAN: No, I do not.
12 VICE CHAIRMAN ROBERSON: Mr. Santos?
13 MR. SANTOS: No, I do not.
14 VICE CHAIRMAN ROBERSON: Thank you,
15 Mr. Shuffler.
16 I would like to introduce the second panel
17 of witnesses who come from the Department of
18 Energy's Office of Environmental Management, also
19 referred to as EM, the DOE Carlsbad Field Office and
20 the WIPP site contractor, Nuclear Waste Partnership
21 LLC.
22 Would the panel members please take your
23 seats at the witness table, as I introduce you?
24 Mr. James Hutton is the DOE Deputy
25 Assistant Secretary for Safety, Security and Quality

1 Programs in EM.
2 Mr. Joe Franco is the current DOE Carlsbad
3 Field Office Manager.
4 Mr. Sean Dunagan is the DOE Carlsbad Field
5 Office Senior WIPP Recovery Manager.
6 And Mr. Robert McQuinn is the Nuclear
7 Waste Partnership President and Project Manager.
8 And Mr. James Blankenhorn is the Nuclear
9 Waste Partnership Recovery and Deputy Project
10 Manager.
11 Thank you, sirs. The Board will direct
12 questions to the panel or to individual panelists,
13 who will answer them to the best of their ability.
14 After initial answers, other panelists may seek
15 recognition by the chair to supplement the answer as
16 necessary. If panelists would like to take a
17 question for the record, the answer to that question
18 will be entered into the record of this hearing at a
19 later time.
20 Does anyone on the panel -- I understand
21 you all have statements. I just reemphasize we are
22 happy to take your statements for the record. But
23 if you would like to make a brief spoken statement,
24 we'd be happy to hear it, as well, too, and we'll
25 start with you, Mr. Hutton.

1 MR. HUTTON: Thank you. Good afternoon,
2 Vice Chairman Roberson, Mr. Sullivan, Mr. Santos.
3 Thank you for the opportunity to discuss WIPP today.
4 In my view, the most important thing that must occur
5 in order for us to restart operations at WIPP is to
6 re-establish the safety envelope of the facility,
7 including both the documented safety analysis and
8 safety management programs.
9 After the events of February 14,
10 inadequacies in the WIPP safety basis were
11 identified as a result of executing the Department's
12 unreviewed safety question process described in the
13 Department's rule 10 CFR 830, nuclear safety
14 management.
15 DOE began implementing operational
16 restrictions and compensatory measures at WIPP to
17 ensure controls for confinement of radioactive
18 material continue to protect workers, the
19 environment, and members of the public. To
20 compensate for these safety basis inadequacies and
21 allow recovery activities to move forward, the
22 contractor developed and CBFO approved a series of
23 temporary safety basis documents called Evaluations
24 of the Safety of the Situation, ESSs.
25 Recovery activities have been specifically

1 authorized by CBFO through the ESS process. These
2 included initial reentry into the underground and
3 other recovery tasks such as ground control in the
4 underground. The CBFO staff, supplemented by DOE
5 headquarters personnel and others from across the
6 complex, performed oversight to ensure the
7 requirements in the ESSs are properly implemented.
8 As described in the corrective action
9 plans for the accident reports, DOE has taken a
10 number of actions regarding improving the safety
11 culture at WIPP. The safety culture assistance
12 visit at WIPP was conducted with team members from
13 the commercial nuclear industry, NRC, NASA, and the
14 DOE complex. The team developed recommendations
15 which both the contractor and CBFO will use to help
16 improve the safety culture at WIPP.
17 DOE has also conducted training and
18 leadership for a safety-conscious work environment
19 for senior leaders at CBFO and the contractor, and
20 one of the pilot sessions for DOE's first-line
21 supervisor course was conducted at Carlsbad.
22 The WIPP DSA revision 5 will require CBFO
23 approval and my concurrence. EM has directed the
24 contractor to use the 2014 revision of DOE Standard
25 3009 for this update to clearly establish

1 expectations and requirements. The safety basis
2 review team has been established and is co-led by
3 the CBFO Nuclear Safety Senior Technical Advisor
4 Jeff Carswell and the EM headquarters chief safety
5 officer Dr. Robert Nelson. The EM headquarters
6 director of the Office of Safety Management, Todd
7 Lapointe, serves as a senior advisor to the safety
8 basis review team.
9 With respect to emergency management and
10 response, EM headquarters conducted a site visit in
11 December 2014 in order to assess WIPP's progress in
12 improving its emergency management capability. We
13 reviewed the site's emergency responders, mine
14 rescue team's capabilities, incident command
15 training, emergency classification and
16 categorization, as well as the emergency operations
17 center configuration and communication capability
18 with the DOE watch office, including the emergency
19 management critical elements.
20 We identified a number of opportunities
21 for improvement and some objectives we felt were not
22 satisfactorily met. We are currently following up
23 with the site on corrective actions and improvement
24 suggestions we've provided.
25 DOE headquarters fire protection resources

1 have been working with CBFO fire protection and NWP
2 contractor resources to understand and clarify the
3 interdependency between the baseline needs
4 assessment and Mine Safety and Health Administration
5 requirements. In my view, there is no conflict
6 between DOE, NFPA and MSHA requirements. Most
7 recently, NWP briefed CBFO on proposed changes to
8 the BNA, the baseline needs assessment, including
9 the underground firefighting strategy. Once NWP
10 submits the proposed BNA, DOE will review it and act
11 accordingly.
12 EM's expectation is that our facility
13 maintenance and engineering programs must be
14 effective at keeping critical structures, systems,
15 and components in a high state of operational
16 readiness. We view this as a key component of
17 ensuring the safety of our workers and facilities.
18 Finally, corrective action plans have been
19 developed by NWP, CBFO, and EM headquarters in
20 response to the fire and phase 1 accident
21 investigation reports. Corrective action plan
22 development for the phase 2 report is in progress.
23 We require an update on the corrective
24 action status monthly. EM will require a review of
25 the effectiveness of the corrective actions once

1 they are complete. Thank you, and I'm looking
2 forward to our discussion today.
3 VICE CHAIRMAN ROBERSON: Thank you,
4 Mr. Hutton.
5 Mr. Franco.
6 MR. FRANCO: Good afternoon, Vice
7 Chairman. I'm Joe Franco. I'm the Carlsbad Field
8 Office Manager. I would like to thank you for the
9 opportunity to address the Board today. As the CBFO
10 manager, I have overall responsibility for WIPP and
11 I'm here to tell you that the last 14 months have
12 been particularly challenging for me. Despite those
13 challenges, I believe we have made significant
14 strides and are well on our way to recovering the
15 facility and restarting waste emplacement, thanks to
16 our dedicated work force.
17 The WIPP recovery plan that was issued on
18 September 30, 2014, identified seven key elements as
19 the strategy to safely resume emplacing waste at
20 WIPP. The first key element, safety, is paramount
21 to the overall recovery strategy. Immediately
22 following the February events, actions were taken to
23 secure and stabilize the plant, restrict onsite
24 access to essential personnel, assess site
25 conditions and status and evaluate potential

1 radiological releases and potential exposures to
2 personnel.
3 As we began our internal analysis of the
4 events, we initiated the deployment of new
5 management and corporate subject matter experts to
6 perform independent evaluation of safety management
7 programs and implementation of compensatory measures
8 to address any deficiencies.
9 A number of inadequacies, as have been
10 identified, as you heard from Mr. Whitney and
11 Mr. Hutton, were in the safety management program
12 associated with the incident, so I will not cover
13 that in this testimony, and I will put it in my
14 record.
15 For the second topic, federal oversight,
16 CBFO has made significant progress during the past
17 12 months in enhancing both the structure and
18 effectiveness of oversight. Judgment of need 24
19 from the fire event AIB report identified the need
20 for CBFO to establish and implement an effective
21 line management oversight program process that will
22 meet the requirements for DOE order 226.1B,
23 implementation of Department of Energy oversight
24 policy.
25 The previous CBFO organization had a

1 number of positions which shared responsibilities in
2 both the program management, which is cost,
3 schedule, and scope, and contractor oversight, so
4 that each individual had multiple hats that they
5 were wearing at the time. But these
6 shared-responsibility staff were not able to fully
7 focus in one specific area and have a subject matter
8 expert in that area.
9 CBFO reorganized and segregated contractor
10 oversight from program management, and the result
11 was a creation of the two new offices, Office of
12 Program Management and the Office of Operations
13 Oversight.
14 A thing to note that I wanted to make sure
15 I stated was that this was something that was in
16 progress prior to the events. We had recognized
17 that issue that we had.
18 New positions created in the Office of
19 Program Management are intended to ensure that the
20 cost, scope, and schedule for all CBFO-wide
21 activities is fully integrated and managed
22 successfully through recovery and throughout the
23 expected life cycle of the facility.
24 In the Office of Operations Oversight, new
25 facility representative positions were created, and

1 included in there we also included positions for
2 radiological protection, industrial hygiene,
3 confinement ventilation -- which is critical, as
4 we've heard, for the ventilation systems -- mine
5 safety, technical qualifications and training,
6 nuclear safety, and work-control positions to
7 increase CBFO oversight capabilities.
8 Initially, as a stopgap measure, we were
9 able to obtain highly qualified personnel from
10 around the DOE complex on detail to WIPP. As of
11 today, 50 percent of the new CBFO positions have
12 been filled. The organization is undergoing a
13 positive culture change to be better equipped for
14 addressing both the program management and oversight
15 needs as it works its way through the WIPP recovery
16 and the resumption of transuranic waste disposal
17 operations safely.
18 I also wanted to discuss some of the
19 actions that have been taken or planned to correct
20 emergency management program deficiencies.
21 Immediately after the February 2014 events, an
22 independent assessment of the emergency management
23 program was performed, utilizing corporate
24 reach-back and subject matter experts across the DOE
25 complex. Gaps identified from this assessment and

1 findings from the Accident Investigation Board fire
2 and radiological release phase 1 reports were
3 consolidated to define the corrective action plans
4 required to establish a healthy and compliant
5 emergency management program. The actions within
6 the plan were subsequently approved by CBFO. In the
7 interim, comp measures were put in place and are
8 implemented throughout the use of evaluation of
9 safety of the situation.
10 The emergency management program has been
11 restructured to align with the current national
12 incident management system, NIMS, and incident
13 command system principles, concepts, and
14 terminology. This allows for a well-managed and
15 coordinated response as well as the seamless
16 integration of external agencies that provides WIPP
17 mutual aid and support. These changes include
18 restructuring the emergency operations center staff
19 positions as well as the development of new training
20 and qualification programs for each position which
21 integrates Nuclear Waste Partnership and CBFO senior
22 management into the process.
23 There have also been significant program
24 enhancements to assist the emergency management
25 decision-makers with emergency categorization and

1 classification and timely emergency notifications to
2 local, state, and federal agencies that you all have
3 mentioned was lacking previously.
4 Furthermore, there has been a complete
5 rewrite of Emergency Management policies, emergency
6 plans and procedures, as well as significant
7 upgrades made to the emergency equipment, systems,
8 and facilities to ensure an adequate response and
9 coordination of any WIPP incident.
10 A revitalization of the emergency
11 management drill and exercise program has been
12 completed to ensure consistency in drill and
13 exercise planning, documentation, conduct, and
14 after-action reporting which has significantly
15 enhanced the overall quality and rigor of the
16 program. The drill and exercise program is a
17 combination of self-assessments, validate the
18 adequacy of plans, procedures, training, equipment,
19 and systems and overall program health. The program
20 enhancements today are only a start in an ongoing
21 cycle of preparedness that will drive continuous
22 program improvements.
23 And that's all I have for right now.
24 VICE CHAIRMAN ROBERSON: Thank you, sir.
25 Mr. Dunagan, we can take it for the record

1 or you can summarize, please.
2 MR. DUNAGAN: I will summarize.
3 VICE CHAIRMAN ROBERSON: Okay.
4 MR. DUNAGAN: Good afternoon, Vice
5 Chairman, Board. Thank you for the opportunity to
6 speak to you today. Today I would like to provide
7 some additional details regarding the progress we
8 have made at the Carlsbad Field Office relative to
9 contractor oversight during the recovery phase
10 activities.
11 As recovery manager, one of my
12 responsibilities is ensuring that there's sufficient
13 review, direction, and validation in recovery
14 functions as well as responses to judgments of needs
15 identified by the DOE's Accident Investigation
16 Board. DOE is controlling the risk of activities to
17 recover the underground and compensating, when
18 needed, for safety deficiencies revealed by the
19 February 2014 events and subsequent activities.
20 Immediately following the events at the
21 WIPP site, work activities were curtailed and
22 underground access was restricted. Limited reentry
23 into the underground and limited work activities
24 have been highly scrutinized on a case-by-case basis
25 by DOE through the evaluation of the safety of the

1 situation process.
2 DOE will continue to use this
3 activity-based work screen approach until the new
4 documented safety analysis revision 5 is fully
5 implemented. Through this approach, DOE is able to
6 adequately control the risk of the activities.
7 As a follow-up to one of the judgments of
8 need, as Mr. Franco just mentioned, CBFO
9 restructured their organization to include the
10 Office of Operations Oversight. The objective was
11 to segregate operations, safety, engineering, and
12 environmental oversight for WIPP facility operations
13 from programmatic production activities to enhance
14 oversight independence, particularly through the
15 recovery phase.
16 I believe it is important to note that
17 prior to the resumption of waste emplacement
18 operations, the Department will conduct a full
19 operational readiness review. This review will
20 ensure readiness of the facility and personnel to
21 restart the facility within the bounds of acceptable
22 risk defined by the safety basis authorization and
23 ensure the facility has adequate safety management
24 programs implemented and sufficient controls in
25 place to start waste emplacement operations within

1 those bounds. Thank you.
2 VICE CHAIRMAN ROBERSON: Thank you, sir.
3 Mr. McQuinn.
4 MR. McQUINN: Good afternoon, Vice
5 Chairman and Board members. I am Bob McQuinn,
6 Nuclear Waste Partnership President and Project
7 Manager. I do thank you for the opportunity to
8 address you today, and I'll give a very simple
9 overview of three topics: Our safety basis strategy
10 for recovery operations and upgrades, and then a
11 very simple overview of what we're doing to improve
12 conduct of engineering, conduct of maintenance.
13 First, safety basis strategy will involve
14 three major elements that we'll talk about, I'm
15 sure, at length in this session. First, we'll
16 continue to use the approved evaluations of safety
17 of the situation for our ongoing recovery
18 operations. I'll revise those ESSs and develop new
19 ESSs for some additional recovery operation scope,
20 and that scope will include the construction and
21 installation of the interim and the supplemental
22 ventilation systems. We'll talk more about those.
23 And then finally, development of a
24 comprehensive revision 5 to the documented safety
25 analysis, that we'll talk about at length.

1 Shortly after arriving at WIPP, I made a
2 number of organization structure decisions and I
3 brought in very experienced safety management
4 program leaders from other AECOM projects in order
5 to address my most critical needs.
6 Structurally, I moved my engineering,
7 emergency management, and contractor assurance
8 organizations to become direct reports to me.
9 Previously they were not.
10 The second week after my arrival, I
11 brought in new leaders for radiation protection,
12 emergency management, and nuclear safety.
13 So everything we've done to stabilize the
14 plan and progress through recovery has benefited
15 from these and a number of other strong experienced
16 leaders.
17 Now, returning to safety basis, the
18 revised DSA will incorporate lessons learned from
19 both events, address inadequacies identified by the
20 Accident Investigation Board and our planned
21 recovery activities and ultimately return to normal
22 operations. And until I finish implementing the new
23 revision 5 of the DSA and TSR, I will use the ESSs
24 to continue the recovery.
25 As you have heard -- I won't repeat

1 here -- the new revision, the DSA, will incorporate
2 Standard 3009-2014. And you have heard, and I will
3 leave for my testimony, a description of the
4 workshop that I organized in order to bring together
5 the right individuals to help us make that decision.
6 In terms of facility upgrades, the two
7 enhancements to ventilation are planned. A
8 skid-mounted interim ventilation system and an
9 underground supplemental system. And I will assure
10 and have assured that safety considerations are
11 appropriately addressed early in both of these
12 projects.
13 The available ventilation is enhanced
14 through these initial modifications, but it will
15 remain limited relative to the capacity that we need
16 for a full operation. So a new permanent
17 ventilation system is essential and is planned.
18 When this system becomes operational, a subsequent
19 revision to the DSA will support our return to a
20 full operation.
21 For the permanent ventilation system,
22 alternative design options have been evaluated, and
23 two are being advanced through conceptual design.
24 We are using Standard 1189-2008 to implement this
25 permanent ventilation system design. This system is

1 in the initial stage of the project and is being
2 executed in accordance with the order.
3 And finally, let me do an overview and
4 finish my testimony by speaking to conduct of
5 engineering and conduct of maintenance, and address
6 some of the actions that we've taken and are
7 planned.
8 We conducted independent assessments of
9 all 17 safety management programs within the first
10 month of my arrival, and specifically looked at
11 engineering, fire protection, work control,
12 surveillance, and maintenance. And the corrective
13 actions not only from the Accident Investigation
14 Board conclusions but from our own independent
15 assessments have formed the basis for my improvement
16 plans.
17 Now, my maintenance of work control
18 organizations are fundamental to everything we do
19 with respect to integrated safety, and I have
20 brought in new managers for both maintenance and
21 work control with years of nuclear experience from
22 Pantex, Savannah River, Lawrence Livermore, and
23 Hanford. And this was a strategic decision in order
24 to use experience from other sites and lessons
25 learned that have a more mature nuclear safety

1 culture than ours currently is.
2 Significant improvements have been made to
3 conduct of engineering with what would be an
4 expected emphasis on cognizant system engineering
5 which was missing previously. As an example, we
6 have incorporated into the annual system engineer
7 walkdown procedure, a new, previously not existing,
8 structured approach for system health reports which
9 are now briefed to me on a monthly basis and include
10 my senior team. These reports, as you would expect
11 from other mature projects, form the basis for
12 identifying and addressing emerging system
13 deficiencies and trends, particularly my safety
14 credited systems.
15 One other example of conduct of
16 engineering improvement is my requirement that the
17 fire impairment process be modified to require my
18 fire protection engineer review and approval of
19 compensatory measures, which did not previously
20 exist, and to use my engineering organization to
21 drive to my level the timely resolution of important
22 systems like fire protection.
23 Finally, WIPP's job hazard analysis
24 process has been enhanced through a work planning
25 and control process that I'm sure we'll talk about

1 at length this afternoon to expand its thoroughness
2 in the process checklist used in the walkdown and
3 planning phases which now engage the worker, and I
4 look forward to talking to you more about my vision
5 for that.
6 I require executive review and approval of
7 the high-hazard work evolutions, and through our
8 re-entries, I led the safety management reviews of
9 all high-hazard work control documents and I
10 required -- we'll talk more about this -- that the
11 field work supervisor and all the workers who are
12 going to be involved personally deliver to me in a
13 formal review process exactly what they were going
14 to do in order to assure myself that their work had
15 been -- their involvement had been included.
16 So that's an overview of what we'll go
17 into in the testimony, and that completes my
18 testimony.
19 VICE CHAIRMAN ROBERSON: Thank you,
20 Mr. McQuinn.
21 And Mr. Blankenhorn.
22 MR. BLANKENHORN: Good morning, Madam Vice
23 Chairman, members of the Board. I'm Jim
24 Blankenhorn, the Nuclear Waste Partnership Recovery
25 Manager and Deputy Project Manager. Thank you for

1 the opportunity to address the Board today and
2 discuss WIPP recovery and safety.
3 I'll be detailing how worker and public
4 safety is protected during WIPP recovery activities
5 by compensatory measures that have been implemented
6 while we strengthen our safety management programs.
7 Immediately following the February events,
8 independent assessments of each safety management
9 program utilizing industry subject matter experts
10 were performed for identification of weaknesses and
11 gaps from the requirements. Compensatory measures
12 were immediately put in place to address these gaps
13 and weaknesses.
14 In addition to compensatory measures,
15 corrective actions have been developed to address
16 findings from the safety management program
17 independent assessments and from the Accident
18 Investigation Board fire and radiological release
19 phase 1 reports.
20 Implementation and documentation of the
21 closure of each corrective action will be verified
22 through a line management assessment scheduled for
23 this summer. Effectiveness reviews will be
24 validated through the conduct of NWP
25 self-assessments later in this fiscal year. A

1 management self-assessment will be conducted to
2 verify compliance and full implementation of the
3 safety management programs and to declare readiness
4 to perform contractor and DOE operational readiness
5 reviews.
6 As part of the proceedings today, I look
7 forward to discussing the actions taken to enable
8 recovery activities and to provide specific
9 discussion on actions related to restoring trust and
10 confidence, establishing emergency preparedness and
11 response programs that ensure workers in the
12 underground can safely evacuate the mine in the
13 event of an emergency, improving and emphasizing
14 work planning and work control, the establishment of
15 a consistent and enduring nuclear safety culture,
16 re-establishing strong, disciplined operations,
17 retraining the work force, and revising our programs
18 and procedures to operate safely in both
19 contaminated and uncontaminated conditions and
20 areas.
21 Thank you again, Madam Vice Chairman. We
22 are now ready to answer any questions you may have.
23 VICE CHAIRMAN ROBERSON: Thank you all.
24 We will take your full statements for the record.
25 Thank you all for your comments. Now we're going to

1 start with board questions, and I'm actually going
2 to start.
3 I'm going to start with you, Mr. Dunagan.
4 You have huge shoulders in the job that you have
5 accepted.
6 The WIPP recovery plan describes the key
7 activities that must be completed to meet the goal
8 or the planned date for resuming waste operations.
9 These activities include resuming ground control,
10 bolting, closing panel 6 and panel 7, room 7,
11 increasing ventilation flow through multiple steps I
12 think you have laid out; completing surveys, cleanup
13 and maintenance activities, decontaminating portions
14 of the underground, completing readiness reviews,
15 and obtaining regulatory approvals. Did I get them
16 all?
17 MR. DUNAGAN: I believe so.
18 VICE CHAIRMAN ROBERSON: Is there another
19 big one I missed?
20 MR. DUNAGAN: No, ma'am.
21 VICE CHAIRMAN ROBERSON: So which of these
22 do you find -- do you view as the most challenging?
23 And along with that, what kind of risk management
24 strategy are you going to employ to ensure that
25 there's success and these remain integrated?

1 MR. DUNAGAN: Well, each of the key areas
2 that you just identified presents its own unique
3 challenges, to be sure. All of them are very
4 important keys to safety and the recovery of the
5 WIPP site, as well. The one that I would personally
6 consider to be the most challenging, in my opinion,
7 would be the ventilation. And the reason I say that
8 is because it is a fundamental shift in the way that
9 we have operated from the past.
10 Prior to the incidents, WIPP ventilation
11 in the underground was not filtered. It was
12 operating at roughly 420,000 cubic feet per minute.
13 Following the incidents, we have maintained constant
14 HEPA filtration mode since then, operating at about
15 60,000 cubic feet per minute, which this reduces the
16 amount of work activities that can go on underground
17 because filtration -- or ventilation, excuse me, is
18 necessary for everything from life sustainability to
19 the underground mining and bolting, to waste
20 emplacement activities, anything that goes on
21 underground, as well as the diesel equipment
22 operation, in removing the diesel particulate.
23 So we are going to implement a three-phase
24 approach to improve the ventilation system. As
25 discussed earlier through several different people,

1 the first one is the interim ventilation system
2 which is going to take the cubic feet from 60,000
3 cubic feet per minute to roughly 114,000 cubic feet
4 per minute, and all of that will be under HEPA
5 filtration.
6 The second phase would be the supplemental
7 ventilation, which would increase it again to
8 180,000 cubic feet per minute. But that would
9 introduce two circuits, if you would, into the WIPP
10 environment: One for the contaminated area, one for
11 the uncontaminated area.
12 The third phase will be the permanent
13 ventilation, which will take years to implement.
14 The reason I consider this to be the most
15 challenging is because prior to the events we hadn't
16 operated in HEPA filtration mode. We're doing that
17 continuously now. The interim ventilation system
18 will continually operate in that mode. The
19 supplemental ventilation systems will operate at the
20 same time on a different circuit. So this is a
21 paradigm shift in the way that ventilation has been
22 done in the past, and that's why I consider this to
23 be the most challenging.
24 We are overseeing this from a DOE
25 perspective in a number of ways. We are

1 continuously interacting with the contractor,
2 Mr. Blankenhorn, who's my counterpart, to ensure
3 that the processes that they're installing, the
4 procedures, and the adequate engineering are
5 involved to make sure that the circuits will operate
6 correctly, that the bulkheads and the dampers will
7 sufficiently isolate one circuit from the other in
8 terms of the SVS through the IVS. Now, we have an
9 IPT, an integrated project team, which we meet
10 weekly and discuss these topics. We discuss issues
11 that are coming up, we discuss mitigation
12 strategies, we discuss ways that we can improve it,
13 and things that we can do, looking forward in the
14 future so that we can resume safe operations.
15 VICE CHAIRMAN ROBERSON: Okay. Thank you,
16 sir. So you're really the DOE's local face for the
17 recovery. Do you have -- would there be any
18 hesitancy on your part if you thought you were
19 pushing faster than you could really assure safety
20 with raising that to your management?
21 MR. DUNAGAN: No, ma'am, for three
22 reasons. One, as Mr. Whitney mentioned in the first
23 session, we have a tremendous amount of support, all
24 the way up to the Secretary of Energy, in ensuring
25 that safety is the priority for the WIPP site and

1 resuming operations. Schedule is a very, very
2 distant part of that. Safety has priority over
3 everything else.
4 On another note, we have the operations
5 and oversight, that change in the organizational
6 structure, which provides more safety, I believe
7 oversight, in my opinion, than there have been in
8 the past because there's not the confusion between
9 oversight and program management. There's not the
10 tendency to focus on schedule and program management
11 rather than oversight.
12 And the third reason for me personally
13 that I would say that I absolutely have safety first
14 in mind is because I'm locally from Carlsbad. I
15 have a beautiful family, young children, and in
16 addition to the coworkers and the environment and
17 the public, I have an innate sense of responsibility
18 to them to ensure that they will -- that the mine
19 will recover safely before any kind of schedule
20 conflicts.
21 VICE CHAIRMAN ROBERSON: Thank you, sir.
22 So Mr. Franco, how are you communicating
23 with the work force in general at WIPP so that
24 Mr. Dunagan doesn't have to make those tough
25 choices?

1 MR. FRANCO: Ms. Chairman, one of the
2 things that we as -- in the Carlsbad Field Office,
3 it's important for me and I did this from the very
4 beginning -- I started here in 2012 -- that my role
5 for the department here, for my work force, is that
6 I'm their cheerleader. I will take their messages
7 up and I will defend the messages.
8 Similar to the comments that were made by
9 Mr. Sean Dunagan here, I also have family here. I
10 have family that works out at the WIPP facility, and
11 I have family that were in the underground during
12 the events. So to me, it touches home that we have
13 to -- and it's my job to make sure that my
14 management team and headquarters does not forget
15 what happened at the WIPP facility and push schedule
16 ahead of safety. And I can tell you that from Moniz
17 all the way down, we have had tremendous support on
18 that very topic.
19 VICE CHAIRMAN ROBERSON: Thank you, sir.
20 Mr. Sullivan.
21 MR. SULLIVAN: Thank you. I have some
22 questions that I will ask the various members of
23 this panel about the evaluations of the safety of
24 the situation and how those interact with the
25 documented safety analysis and safety management

1 programs.
2 I'd like to start by asking Mr. McQuinn
3 for maybe a little bit of public education, since
4 this is a public hearing, people are listening,
5 heard all those terms already. Can you just take a
6 minute or so and as briefly as possible explain the
7 difference in these things? There's three specific
8 things: Documented safety analysis, evaluations of
9 the safety of the situation, and safety management
10 programs.
11 MR. McQUINN: Okay. There are two equally
12 important documents that are the basis for our
13 nuclear safety program, and they're known as a
14 documented safety analysis. And then flowing out of
15 the documented safety analysis are the very specific
16 requirements called technical safety requirements,
17 and we comply with those rigorously.
18 I have 17 safety management programs that
19 are named in both the DSA and have dedicated
20 chapters in the technical safety requirements that
21 basically form the basis for formality of operations
22 and conduct of operations, and we've already named a
23 number of those: Conduct of maintenance, conduct of
24 engineering, conduct of operations. So that is our
25 normal basis, and I'm held accountable to implement

1 that rigorously. And if I find myself not to be in
2 compliance, then the follow-up process reporting
3 that and evaluating the cause of that noncompliance
4 and fixing that.
5 When I arrived on March 16, Sunday, March
6 16, I found that there were some fundamental gaps at
7 that moment, some inadequacies that we typically
8 call either potential inadequacies of our safety
9 analysis or positive unreviewed safety questions.
10 And those terms aren't intuitively obvious. But I
11 found a particular gap with respect to the
12 filtration system's classification and a number of
13 other issues.
14 And so Joe and I together, that very first
15 week I was here, wrote the first temporary safety
16 basis. It happens to have the name "Evaluation of
17 safety of the situation," but it's a temporary
18 safety basis that's authorized by the Department's
19 directives. So that first week we implemented a
20 very rote and approved and implemented a very
21 important temporary safety basis, ESS1.
22 To speed forward, I have written a total
23 of eight of these ESSs, and they all exist, and I'm
24 required to be in compliance with them all today.
25 And as we've recorded in our testimony, they are a

1 necessary part of our basis to drive recovery until
2 the new revision, revision 5, to the DSA and the
3 TSRs is completed and approved and implemented. And
4 we'll talk a lot more about that. But that is a
5 fundamentally important activity but, in the
6 meantime, these temporary safety bases are an
7 important foundation for us.
8 MR. SULLIVAN: Thank you for that. Now,
9 so in the ideal world the way it's supposed to be or
10 the way it normally would be, except for these
11 accidents, we would have had a rigorous and complete
12 documented safety analysis. But today we now have
13 the documented safety analysis which then gives us
14 our TSRs, as you explained.
15 And we also have eight ESSs, evaluation of
16 the safety of the situation. It seems like there's
17 a lot of documents out there. Are these
18 coordinated? Are we having any issues with having
19 the work force be able to move from one to the
20 other, and have all of the requirements laid out so
21 that they can follow them? My experience is, when
22 you have things in many different places, it's easy
23 to look at one and miss something that's in another.
24 Can you speak to that, please?
25 MR. McQUINN: Okay. A couple of

1 additional terms, and I won't belabor them. But
2 just to use the directive terms. So I'm required to
3 maintain accurately what's called a safety basis
4 list. And so in a perfect world there would just be
5 two documents on that list: The documented safety
6 analysis and the technical safety requirements.
7 But now I have a more complicated list,
8 and so I have many documents, including these eight
9 evaluations of safety of the situation, and we are
10 managing that list rigorously. But complex is not
11 necessarily good, and so we take that issue of
12 configuration management very seriously.
13 Now, let me speak about the workers. So
14 it's my engineering and nuclear safety organization
15 that manage that list and its rigor, and I'm very
16 comfortable and confident in that. These temporary
17 safety bases -- we wrote those for particular needs,
18 starting with habitability, but then as we executed
19 the initial entries underground, we wrote new or
20 revised ESSs to authorize those activities. And as
21 an example, my authorization to close panels 6 and 7
22 are defined in these ESSs.
23 Now, you didn't bring it up, but let me
24 bring it up. I had a violation of one of my ESSs
25 last Monday, a week ago Monday. And I took that

1 seriously, and as we have -- we reported that and
2 evaluated that, we made note that over the last nine
3 months this was the fourth noncompliance with this
4 suite of temporary safety bases. And so we stopped
5 and we did a root cause analysis, an initial root
6 cause analysis, and I required last week, then, that
7 we go and look at the implementation of all eight of
8 these temporary safety documents. And as a result
9 of that, Sunday night I made a decision and starting
10 this past Monday morning we began a daily series of
11 work pauses across the whole organization. And
12 ultimately this week I have made a decision that I'm
13 going to consolidate and revise these eight
14 temporary safety documents.
15 Now, that wasn't an easy decision, because
16 I don't want to lose focus on the most important
17 task of rewriting the foundational documents. But
18 we'll be in this mode perhaps for another nine
19 months or so, and so I'm going to make -- I made a
20 conservative decision, Mr. Franco supported me in
21 that, and we're going to take the time to improve
22 these temporary safety bases. And if that affects
23 schedule, then so be it.
24 But ultimately there are some weaknesses
25 in those documents that we will address, and

1 ultimately there are some complexities in them that
2 make it difficult to implement rigorously. And I'm
3 going to take the complexity out and we're going to
4 simplify and make it simpler for the front-line
5 workers to understand and to implement the controls.
6 MR. SULLIVAN: Thank you.
7 So Mr. Hutton, I'm going to turn to you
8 now. So as Mr. McQuinn was just explaining, they
9 have eight of these ESSs, they had a number of
10 documents, and now they have found some issues,
11 which actually sounds to me like a glass half-full.
12 You know, we prefer to find no issues. But if there
13 are issues, at least the contractor in this case is
14 finding them themselves and taking action, and that
15 sounds good to me.
16 So my question for you is: What is the
17 guidance that comes out of the DOE headquarters?
18 Was there direction to do eight separate ones or do
19 them as necessary? Coordinate? Was any guidance
20 provided from the headquarters of Department of
21 Energy on how this safety basis evolution -- and I
22 think this is an evolution. We had a safety basis
23 before. Ultimately we will have one coordinated
24 document sometime in the future, and this is the
25 transition phase. Was there any guidance given on

1 how this was supposed to be done?
2 MR. HUTTON: Yes. The guidance
3 principally is contained in the department's nuclear
4 safety rule, CFR 830. And what it requires is this.
5 When inadequacies in the safety basis are
6 identified, then the contractor is required to
7 immediately place operational restrictions on the
8 facility, place it in a safe condition. They're
9 required to notify DOE.
10 They're required to then perform an
11 unreviewed safety question determination around that
12 inadequacy to see if it is bound by the existing
13 safety basis or not.
14 And finally, they're not allowed to remove
15 those operational restrictions they put in place
16 until an evaluation of the safety of the situation
17 has been performed. So that's where it comes from.
18 And so, you know, exactly whether the
19 contractor chooses to write one document or two or
20 three, you know, is not specified. What we require
21 is that when the safety basis is inadequate, before
22 we undertake activities -- for instance, re-entering
23 the underground, you know, following these events --
24 we require that controls be in place adequate to
25 protect the workers, the public, and the

1 environment.
2 And so if the safety basis or the safety
3 management program implementation has been
4 inadequate, those, you know, temporary controls need
5 to be put in place in order to allow those
6 activities to occur. And of course, those
7 activities need to occur, you know, in some period
8 of time because otherwise, you know, eventually the
9 underground wouldn't be recoverable if we waited
10 long enough to do that. But it's got to be right.
11 I think it was done methodically.
12 You know, then those requirements, you
13 know, have to be implemented in a rigorous and
14 disciplined manner. The procedures have to be
15 maintained that implement those requirements. Those
16 procedures have to be executed reliably and
17 repeatedly in the course of the work that goes on.
18 And that can be challenging, you know. It's
19 challenging in all facilities.
20 I think mostly the folks that are, you
21 know, working directly from the ESSs documents
22 themselves, as Bob alluded to, are the engineering
23 or safety folks. They're the ones that, you know,
24 produce the procedures, but then the operators
25 execute or, you know, other folks in the facility

1 execute.
2 MR. SULLIVAN: Okay. Do you think the
3 guidance is adequate, though? You have guidance
4 that addresses a situation where there's an issue
5 raised with the documented safety analysis. I guess
6 I'm not -- I'm wondering if the guidance is accurate
7 for a case where you have actually had an accident.
8 So you go from a scenario where we had a facility
9 and we had a documented safety analysis for that,
10 and now we really don't have the same facility
11 anymore because of the accident. In this case, we
12 had ventilation for a mine that wasn't contaminated
13 and was never intended to be contaminated. Now it's
14 contaminated. So it's really not the same facility
15 anymore.
16 MR. HUTTON: It's a different situation,
17 certainly.
18 MR. SULLIVAN: Right. And so that could
19 happen somewhere else, a different facility; and
20 with any accident, presumably the accident would
21 leave the facility not in the same condition that it
22 was before the accident.
23 So I guess my question to you is: Is this
24 guidance specific enough? It sounds to me like the
25 contractor was given some guidance on what to do,

1 but the contractor chose a course of action and now
2 they're shifting to a different course of action to
3 try to lessen the complexity by putting everything
4 together. Do you think the guidance that you have
5 is specific enough?
6 MR. HUTTON: I think that it is adequate,
7 actually. You know, you get into the unreviewed
8 safety question process and DOE has a guide on how
9 to implement that, it's extensive, it's detailed. I
10 think there's adequate guidance. You know, it's not
11 going to be specific to any one particular facility
12 or any one particular situation, because they're all
13 different. But I guess I think it is adequate, yes.
14 MR. SULLIVAN: Okay. Mr. Franco, the role
15 that your organization plays in this process --
16 again, a process going from the documented safety
17 analysis that we had before to the one we're going
18 to have in the future and whatever we have as a
19 temporary measure.
20 MR. FRANCO: I'd like to add, you know,
21 when we encountered the situation with the events,
22 the stabilization of the facility was key, and so
23 when we looked at and saw that the safety basis was
24 inadequate, the initial view was that we needed to
25 put something in place that reassured us that we

1 were safely protecting our work force and the public
2 and the environment. So that's where ESS01 came
3 into play.
4 Now, from that point on, myself and Bob
5 McQuinn and Jim Hutton actually had many discussions
6 about the full -- you know, where we're going to end
7 up at the end, and we knew we were going to have to
8 rewrite the documented safety analysis. There was
9 going to have to be a full rewrite.
10 Now, in the interim, as you remember when
11 we started this process, and we also had -- your
12 staff was there helping us through this process. As
13 we went through this process, we identified what are
14 the phases that we need to do to get to certain
15 things. You know, we needed to get in the
16 underground. We needed to evaluate what is actually
17 happening in the underground, and so we wanted to
18 take various ESSs to drive us through that because
19 we didn't know the condition in the underground. We
20 still didn't know what actually had happened that
21 got us to this -- where we were at the time. We
22 knew we had an event in the underground that was
23 with a TRU waste. There was a lot of speculation
24 that ranged from, you know, roof failure all the
25 way -- and so we evaluated all of those things as we

1 started to enter the mine, in a methodical process,
2 and we knew that we were going to have various ESSs
3 to help us, guide us through, and make sure that we
4 had covered all the safety bases.
5 The mine was in a different configuration.
6 We had just had to fire all the SCSRs, and all those
7 had been used that were brought to the station, so
8 it wasn't like you could go down there and
9 everything was still in the same configuration.
10 So we actually took a very methodical
11 approach utilizing these ESSs, knowing that there's
12 a risk also when you have so many of those and you
13 add all of these requirements. Of course, 100
14 requirements are in there on how we're implementing
15 today. The rigor of that is still important for us,
16 to make sure that we have this cross-functional.
17 So I believe the decisions that we make
18 today, taking our time, making sure we're doing
19 these methodically, going through the various ESSs
20 and making sure that each exercise and event that
21 we -- activity that we start to perform in the
22 underground is evaluated separately, and until we
23 get to the final documented safety analysis, I
24 believe this is the right approach.
25 MR. SULLIVAN: Okay. And Mr. Blankenhorn,

1 you're responsible for taking these ESSs and then
2 making sure that they get into each and every --
3 whether it's a safety management program or work
4 procedure, that they get appropriately flowed down
5 into those specific documents that the workers will
6 use; is that correct?
7 MR. BLANKENHORN: Yes, Mr. Sullivan.
8 Thank you. The process that we utilize, once CBFO
9 has approved the documents, we then go through an
10 independent verification process that maps the
11 individual controls to the implementing
12 documentation, and then we capture that information
13 on the linking document database, which then gives
14 us a ready reference on where the reference is and
15 where the controls themselves are captured. And
16 then the organization goes through training and
17 qualifications and then an oral board type process
18 for the folks that are responsible for implementing.
19 And that's all then done under an IBS process that's
20 then, once it's completed and the results are
21 finalized, then that goes back up through the
22 management chain for approval then to implement the
23 ESS as it's been approved.
24 MR. SULLIVAN: Okay. So if we just
25 take -- Mr. McQuinn referred to a violation that

1 occurred last week. If we just take that as an
2 example, where was the breakdown? Was it in the
3 flowdown of the requirements? Was it in the
4 training, the qualification? What was the breakdown
5 on that one?
6 MR. BLANKENHORN: You know, unfortunately,
7 the methodology that we had chosen to be our
8 implementing process was the linking document
9 database. And in that process, there were a number
10 of implementing documents that we had made some
11 mistakes on in terms of how we populated this
12 linking document database.
13 And there were also some issues with
14 interpretation as the organization took the
15 requirements out of the ESS and translated them into
16 the work documents themselves. There were some
17 translations that were made and the full intent of
18 the control then were not fully captured in the
19 implementing documents. And so as we went through
20 and did the extended condition reviews that
21 Mr. McQuinn referred to, we identified a number of
22 those instances both in the implementing documents
23 and the linking document database, and so we put in
24 place controls now to address those issues, to train
25 and qualify the work force, as well as to make those

1 corrections, and we put some additional compensatory
2 measures in place while we're in the process of
3 going through and making those enhancements to the
4 program.
5 MR. SULLIVAN: Okay. So Mr. McQuinn --
6 I'm sorry, you want to add something?
7 MR. McQUINN: Can I add a thought,
8 Mr. Sullivan? Because it's important. It's one of
9 the important causes with respect to the events.
10 When I arrived there, there was not a contractor or
11 performance assurance organization. There was one
12 individual who coordinated issues management, and I
13 now am building a 15-person contractor assurance
14 organization.
15 Now, let me relate that back to the
16 importance of these controls in the temporary safety
17 bases. So when we wrote each temporary safety
18 basis, and operations and engineering implemented,
19 it was an important lesson learned from around the
20 complex of independent verification. And we did
21 independent verification, but I used members of the
22 operations organization to do that, and ultimately,
23 I believed it to be fully adequate. And this past
24 week I have concluded that it wasn't independent
25 enough, and so I have decided and declared that all

1 of my future implementation, all future independent
2 reviews, will be done through my new contractor
3 assurance organization and contractor assurance
4 system.
5 So in that case, that line of defense,
6 which I believed to be adequate, was not. But I'll
7 fix that through the rollout of my new contractor
8 assurance function.
9 MR. SULLIVAN: Thank you very much. I
10 appreciate that.
11 VICE CHAIRMAN ROBERSON: Thank you,
12 Mr. Sullivan.
13 Mr. Santos?
14 MR. SANTOS: Thank you, Madam Vice
15 Chairman.
16 I have several questions, follow-up
17 questions. I'll start with Mr. Franco.
18 Looking at the technical assessment report
19 and their conclusions regarding the particular drum
20 that had the release, it is my understanding that
21 there are still several drums with a similar
22 composition in the underground which may have the
23 possibility of another release. Can you explain to
24 the public in detail how the public and the workers
25 are being protected in the potential event of

1 another drum release, please?
2 MR. FRANCO: Yes, I can. We have taken
3 measures to make sure, from the time of the event,
4 once we identified that it was a drum from the
5 Los Alamos office that had caused the event -- we
6 took a conservative approach and had put the safety
7 basis items in place and the work constructions to
8 make sure that we put all the proper protective
9 equipment for our personnel, depending on where they
10 were going to be in the mine, also to support any
11 activities.
12 So before any work is done in any of the
13 contaminated areas in the underground, there's a
14 very rigorous work control process that's completed
15 for that approach.
16 Now, what I can tell you also is that
17 before anybody goes in the underground, we also took
18 a lot of effort and changed the program. We talked
19 about the emergency response program earlier, that
20 that was one of the SMPs that needed to be upgraded.
21 So what we did is, we made sure, before we even went
22 into the clean area of the mine, that we had a
23 robust system in place for the evacuation and
24 accountability so we had continuous air monitors put
25 in the underground for early detection and being

1 able to evacuate personnel that were in the clean
2 area.
3 Also, you know, we continued to do the
4 exercises and drills to make sure that they can
5 evacuate, and the training that goes on with that
6 approach.
7 Also, every work instruction has a job
8 hazard. There's a prebriefing on a daily basis that
9 covers all of the work activity that's going to be
10 performed in the underground and very specifically
11 addressed by each supervisor that's going to go
12 perform that activity.
13 For the underground part of actually going
14 into the contaminated area and going by where the
15 containers are, that has another set of rigor that
16 goes with it and that rigor is contained in the
17 radiological work permit that ties into looking at
18 what is the potential for an actual event. The
19 personnel have monitoring devices that they carry
20 with them that they're -- as they're going, and they
21 also have respiratory protection. They're always
22 upstream of the airflow for the underground.
23 Now, the ventilation system, as in
24 ventilation and filtration, as we talked, and that's
25 not going to change anymore. And so during -- if

1 you have an event, it's still in the filtration.
2 That airflow is not changing and remains the fact
3 that the emergency notification systems and the
4 instrumentation the individuals have and the
5 training that they receive is for immediate
6 evacuation of the area and going up to the
7 evacuation at the egress hoist station, which is the
8 waste hoist, or normally, and the salt waste is
9 secondary.
10 MR. SANTOS: I would like to follow up.
11 You mentioned continuous air monitors. It is my
12 understanding that it was a continuous air monitor
13 located in the underground that detected the
14 radiological release and initiated the shift in the
15 ventilation from unfiltered to filtered. But had
16 the event happened, let's say, February 12th, two
17 days before the event, that might not have been in
18 place and the release could have been more
19 significant. Is my understanding correct?
20 MR. FRANCO: That is correct.
21 MR. SANTOS: So what sort of -- have the
22 requirements regarding continuous air monitoring
23 changed since the event? And if so, can you
24 elaborate on some of these details?
25 MR. FRANCO: Yes. And as we've been

1 talking about the ESSs, we captured where the
2 requirements have changed for the continuous air
3 monitors. Now, station B, that's the effluent
4 coming out of the HEPA filtration side. That
5 station did not have a continuous air monitor. We
6 have installed a continuous air monitor now that
7 actually provides a signal to the central monitoring
8 room that's there 24 hours a day, monitoring that
9 item.
10 Now, station A is previous to the
11 filtration system. That, we have fixed air samplers
12 there that we sample or take readings on. Now, and
13 also what we've done is, we've added continuous air
14 monitors in the underground in various areas that go
15 with the flow of the ventilation system and we're
16 monitoring those on a continuous basis.
17 MR. McQUINN: Mr. Santos, could I add a
18 thought? I agree absolutely with everything Joe
19 said. Remember, up until we found the LANL drum,
20 whether we should have or not, we were more
21 suspicious that there had been a structural failure.
22 So when we found the LANL drum and were faced with
23 there could be a noncompliant drum, we wrote a
24 potential inadequacy, a positive unreviewed safety
25 question determination, and one of the eight ESSs is

1 specific to the issue that there now was at least
2 one and could be many more noncompliant drums.
3 So we followed the process and one of the
4 eight ESSs speaks to not only the safety of offsite
5 individuals and co-located workers, but the facility
6 workers, both aboveground and underground, and that
7 ESS lays out many controls, particularly continuous
8 air monitors, where they have to be and what their
9 operability has to be, and the surveillance of that
10 operability. So one of those eight was in direct
11 reaction to the fact that we now had to assume that
12 there could be other noncompliant drums, and that's
13 one of the eight ESSs that has the controls both
14 aboveground and belowground.
15 MR. SANTOS: A specific question regarding
16 the newly installed continuous air monitor
17 underground. Is there a requirement, for example,
18 if they were to go out of service, to evacuate the
19 underground? I understand you're under filtration
20 flow, so you're mitigating releases to the
21 environment. But underground there might be an
22 opportunity where no radiological work is being
23 conducted, you still have workers down there. Are
24 there requirements regarding the in-service
25 condition of the continuous air monitor?

1 MR. FRANCO: Yes, there are. And --
2 MR. SANTOS: And what would be the
3 actions?
4 MR. FRANCO: So we have -- as we were
5 talking about the emergency management program and
6 we finalized some of the procedures which are -- the
7 numbers are like 12 ER 4903 that includes all of the
8 continuous air monitors for both -- now it can
9 include both surface and underground. But right now
10 they're separated. 4903 and 4904.
11 But they both address the evacuation. If
12 you have -- for personnel to remove from the area of
13 where the CAM is and take appropriate actions to
14 move to the egress hoist station and assemble. So
15 there's procedures that we have in place. There's
16 also the emergency management program that then
17 exercises those procedure changes to make sure that
18 people understand what the actual immediate actions
19 are for those items.
20 MR. SANTOS: I'll repeat my question. I
21 understand that actions are being described in the
22 event a continuous air monitor alarm may initiate.
23 My question has to do with if you were to find them
24 out of service, does that trigger some sort of
25 action?

1 MR. FRANCO: Yes, it does. And we have
2 procedures for that, because the radiological
3 control technician who works for Mr. McQuinn here,
4 that we oversee -- there are procedures involved for
5 them to take actions. If you have a malfunction,
6 out of service, you know, something that's happening
7 with the CAM, any kind of alarm, we have an
8 appropriate procedure for that. Also, if the
9 radiological control technician gets up there and
10 sees that something is not correct with the
11 continuous air monitor, they're supposed to report
12 immediately to the central monitor room and then go
13 through the immediate actions there.
14 MR. SANTOS: So do I need to have the
15 radiological technician available when a malfunction
16 is detected by the worker?
17 MR. FRANCO: No. All workers are trained
18 that if there's an alarm, doesn't matter if it's a
19 malfunction or -- when they see an alarm from a CAM,
20 all workers know what to do with that alarm. They
21 have to respond. Am I -- I don't know if I'm
22 answering that.
23 MR. McQUINN: So a couple of thoughts.
24 The radiological workers are trained to respond to
25 the sound of a CAM alarm. They do not have to be

1 able to see it. They simply respond to the unique
2 sound of the alarm and they evacuate. Okay? So
3 they do not require assistance from the RADCON
4 technician.
5 And back to the first question, to add a
6 little bit, so underground CAMs must be functional.
7 Remember, we're in filtration mode. The first ESS
8 says that I may not leave filtration mode. So the
9 CAM is not required to make a decision about
10 filtering or not. But the underground CAM must be
11 operational at the beginning of the day in order to
12 go underground. And in addition to that, the ESS
13 requires that both the station A has to be
14 checked -- that's before filtration -- to prove that
15 there's no activity; and the station B CAM has to
16 show that there's no activity.
17 So all those things have to be true before
18 we go underground and clear the underground for work
19 each day.
20 MR. SANTOS: One question of
21 Mr. Blankenhorn. It's my understanding that the
22 filtration, the filtrated ventilation system needs
23 to be in standby mode and is now being operated in a
24 continuous mode; is that correct?
25 MR. BLANKENHORN: Yes, that's correct.

1 Most of the time, Mr. Santos, under normal
2 operations prior to the events, the 700 series fans
3 provided the ventilation for the underground. The
4 860 series fans -- and there's three of each -- the
5 860 series fans were specifically for shift to
6 filtration and so they pull the air through the HEPA
7 systems.
8 The systems themselves were designed to
9 run periodically. As 700 series fans were either
10 taken out of service or for repair or maintenance,
11 they were also used to augment the ventilation
12 system with the 700 series fans provided.
13 Now, I don't know that I would go so far
14 as to say they weren't designed to run continuously;
15 but clearly, prior to the events, it wasn't
16 envisioned that we would operate the WIPP facility
17 as a contaminated facility and therefore, wouldn't
18 have the need to run through the filtered system
19 continuously.
20 MR. SANTOS: Can you describe some of the
21 challenges you have been having with this new mode
22 of operation?
23 MR. BLANKENHORN: In terms of the fans
24 themselves, Mr. Santos?
25 MR. SANTOS: Yes.

1 MR. BLANKENHORN: So I think the most
2 important challenge or most significant challenge
3 that we've been having with these fans is just the
4 reliability. There are three. We need one of them
5 to operate, and we need a second one to be as a
6 standby. Ideally we'd have all three of them fully
7 functional. But in order to run these systems and
8 do the preventive maintenance checks and services on
9 them, in some cases they have to be operational; in
10 some cases they have to be turned off. And so we do
11 have to cycle the fans to be able to perform the
12 quarterly and annual preventive maintenance checks
13 on them.
14 But more importantly, I think, the
15 reliability of the systems is an ongoing challenge
16 that we're spending a great deal of effort and
17 putting a great deal of attention on. Obviously,
18 again, with the thought that these fans wouldn't
19 necessarily be needed to run in filtration mode for
20 long periods of time, we're going through now and
21 looking at how these fans operate, whether the
22 damper systems are manual or automatic. The
23 electrical systems that feed them. We're looking at
24 all these things and looking at it from the
25 perspective of now that we look at them as important

1 to safety, that's post events, we're looking at all
2 the things we need to do to increase the reliability
3 of these systems going forward and thinking that
4 we're going to have to operate them for a period of
5 years.
6 MR. SANTOS: Thank you.
7 VICE CHAIRMAN ROBERSON: Thank you,
8 Mr. Santos.
9 Just a couple of brief questions. First
10 for you, Mr. Hutton. Soon after the events, the
11 Board communicated to the Department its concern
12 about ensuring the viability of the confinement
13 ventilation system and the Board advised the
14 Department to evaluate the safety controls and
15 contingency plans necessary to maintain
16 functionality of the confinement system, and DOE
17 responded in April of 2014.
18 Since that time, you know, things have
19 progressed, more activities have come online. What
20 process is DOE using to ensure that the integrity of
21 the confinement system is maintained?
22 MR. HUTTON: I'm sorry, could you repeat?
23 I didn't quite understand the...
24 VICE CHAIRMAN ROBERSON: What review
25 process is DOE using to ensure maintenance of the

1 integrity of the confinement ventilation system in
2 protecting the public and the worker?
3 MR. HUTTON: I see. That's been, you
4 know, the subject of these temporary safety basis
5 documents that we've put in place. You know,
6 shortly after the event we started to -- you know,
7 we recognized the significance of the ventilation
8 system, and so we recognized the need to put in
9 place controls that would maintain it functioning
10 properly for confinement purposes, and so on.
11 And so we did that principally through the
12 ESSs process, through the temporary safety basis
13 documents that the contractor prepared and that DOE
14 reviewed and approved. And so those put in place
15 controls to preserve the operability and the
16 integrity and the functionality of that system to
17 perform its confinement function.
18 And then, of course, we perform oversight
19 as Bob described -- or Jim. They do an independent
20 verification, implementation of those controls. DOE
21 provided oversight of that to satisfy ourselves that
22 that was adequately put in place, things that would
23 protect the integrity of those fans, combustible
24 material controls, vehicle barrier controls, as well
25 as routine monitoring of the filters and the fans

1 and that sort of thing. So that's fundamentally the
2 process we have used to make sure that those systems
3 remain operable.
4 VICE CHAIRMAN ROBERSON: Okay. So
5 Mr. McQuinn, we talked about, you know, key controls
6 when it comes to radiological events. What are the
7 fire protection controls in place that are essential
8 to ensure the integrity of the confinement
9 ventilation system? What are some of the key fire
10 protection controls?
11 MR. McQUINN: Fire protection related to
12 the ventilation system?
13 VICE CHAIRMAN ROBERSON: That are
14 important to ensure the functionality of the
15 confinement ventilation system.
16 MR. McQUINN: Okay. You know, there's a
17 whole suite of fire protection controls around life
18 safety, but sort of unique to the ventilation
19 system, the primary temporary controls because there
20 weren't any that were defined in the existing
21 revision for the DSA, are around combustible loading
22 to make sure that both inside the filter building,
23 exhaust filter building, and in the area that could
24 affect outside the building, the very first ESS
25 implemented transient combustible controls. And

1 that is the primary way there might be a scenario
2 where fire would affect the reliability of
3 confinement ventilation.
4 Now, as we write revision 5, obviously
5 we're taking a complete new look from a hazard
6 analysis standpoint. Ultimately, we could end up
7 changing the functional classification of the
8 existing system. But right now, through the ESSs,
9 it's mostly transient combustibles.
10 MR. HUTTON: If I could add one thing to
11 that, you know, and Bob knows this. But obviously
12 the filter system itself can be affected by, you
13 know, fire in the underground, and so controls on
14 cleanliness of diesel-driven equipment, hydraulic
15 systems so that they are not likely to create a
16 fire, limitations on diesel exhausts, ensuring we
17 have the proper air flow to the right places, both
18 to protect the people in the area, but also to
19 ensure that the filter system remains in service and
20 performing its confinement function as well as, you
21 know, the monitoring of the filter system, and then
22 various differential pressures in the underground.
23 So, you know, all controlled through the ESS
24 controls that are put in place.
25 MR. McQUINN: In fact, Jim triggers

1 another thought. Soot-loading from a fire that
2 would make its way to the filters and blind the
3 roughing filters and they, in turn, fail and
4 potentially damage the HEPA filters -- that wasn't
5 adequately addressed in the current DSA, and so that
6 first ESS also addressed what happens if there was a
7 fire and significant soot-loading. And so there's
8 delta pressure controls that are embedded in that
9 ESS that make sure that we replace filters so that
10 if we had another event, we wouldn't have a pressure
11 drop problem that would affect the HEPA filters.
12 VICE CHAIRMAN ROBERSON: So I guess,
13 Mr. Franco, my last question on this topic is, I
14 recognize, as Mr. Whitney cited, you guys are moving
15 expeditiously to close panel 6 and to close the
16 subject room of panel 7. What gives DOE confidence
17 that the contractor has the right contingency plans
18 in place, just in the event that you did have
19 another drum event?
20 MR. FRANCO: What gives us the confidence
21 is that we have seen, you know, drills and exercises
22 as we continue to move forward with this process.
23 Also, we have been provided a large amount of
24 oversight on, as these things are being developed,
25 all the way from the engineering to implementation

1 and the operations side.
2 And the other thing that I think, for me,
3 that makes me feel real confident is that we have
4 also reached out to the department and have received
5 technical experts to come in that have not been
6 normally engaged, so they're coming in with fresh
7 eyes and are looking and they're coming back and
8 saying, "Okay, this one fits and looks good, and
9 we're going forward in this process."
10 So it's been a very -- for me it's a
11 continuous effort where we continue to monitor,
12 continue to oversee. We have the expertise now, you
13 know, we have new employees with MSHA experience.
14 Our team has a lot of mining experience. Now with
15 the segregation again, as we talked about, for the
16 organization, that -- you're starting to see the
17 fruits of that. Our team is actually engaged in a
18 lot of the detail of the oversight piece of it, and
19 so, you know, it's good to start seeing the progress
20 as we're moving forward, and still having the
21 mentoring process ongoing. We will not stop that.
22 Where we're having the expertise also come and
23 support our field activities and making sure that
24 we're applying the rigor that needs to for each of
25 these items.

1 So so far, as we're moving forward, the
2 planning and approach that we have taken, especially
3 at these panels, panel 7, room 7, and getting that
4 closed is a key component for us. And then also the
5 decontamination that's going on now, that's critical
6 as we move forward in the operation and that's going
7 very well.
8 VICE CHAIRMAN ROBERSON: Mr. Sullivan?
9 MR. SULLIVAN: Thank you.
10 Mr. Dunagan, you mentioned earlier the
11 challenges associated with bringing more ventilation
12 online. You mentioned an interim ventilation
13 system, supplemental ventilation system. I
14 understand we need more ventilation in order to run
15 more machines underground. Will there be any
16 nuclear safety functions performed by the additional
17 ventilation systems?
18 MR. DUNAGAN: The interim ventilation
19 system is classified as important to safety.
20 Through the DSA process, revision 5, it will be
21 determined if it is required to be identified as
22 safety-significant -- I believe that's the source of
23 your question -- through this time. But it is being
24 constructed with quality requirements that will
25 allow it to be -- support commercial grade

1 dedication, so safety-significant, over time, but
2 initially it's identified as important to safety.
3 MR. SULLIVAN: Okay. So these systems
4 will be in the documented safety analysis as that
5 document will be revised, Mr. McQuinn; is that
6 correct.
7 MR. McQUINN: Yes. If I could add, so for
8 both the interim and the supplemental ventilation
9 systems, there are very likely to be ESS level
10 controls for each of those, okay? So right now,
11 we're using a temporary safety basis with respect to
12 the construction of the systems, and then there will
13 be a revision to that to authorize its startup. So
14 Sean is right, we have functionally classified the
15 systems as important to safety, but I'm certain that
16 there will be ESS-level TSR-level controls related
17 to both. And right now we are writing the new
18 revision to the DSA and we're working our way
19 through what is the correct functional
20 classification for the existing system, and we're
21 anticipating that that functional classification
22 could increase. And so we're doing NQA1 quality
23 construction of the interim ventilation system so
24 that we can do commercial-grade dedication to it and
25 back fit it to a safety significant functional

1 classification if it turns out that the revision 5
2 concludes that that's what it needs to be.
3 MR. SULLIVAN: How about NQA quality
4 requirements in the procurement, in the pieces and
5 parts? Are we going to have confidence that they
6 are going to be made to nuclear standards for a
7 safety-significant system?
8 MR. McQUINN: Jim, you want to help me
9 with that?
10 MR. BLANKENHORN: Yes.
11 Mr. Sullivan, the contractor and the
12 procurement process that we use verified that the
13 vendors being used were all NQA1-qualified and that
14 they also -- and you'd recognize the names -- they
15 also provide products to the nuclear industry. So
16 they're very familiar with the nuclear standards.
17 And so in this particular -- in the IVS case and in
18 the supplemental ventilation system, both those
19 systems, the equipment is being procured to the
20 NQA1-standards, not just the final product, but all
21 of the manufacturing and their procurement processes
22 for materials and equipment. That's all being --
23 following the process, and we've got inspectors that
24 are there routinely watching the fabrication and
25 manufacturing.

1 The permanent ventilation system,
2 obviously that will go through a different process
3 in terms of -- it's going through the 413 process,
4 and so it will have its own PDSA which will define
5 its functional requirements so it will not be in the
6 DSA rev 5. The IVS and SVS will. But its
7 procurement strategy will then follow whatever the
8 PDSA functional requirements require.
9 MR. SULLIVAN: Mr. Franco, my last
10 question. Is there anything about this interim
11 ventilation system that really makes it interim?
12 Could this be like the first P in WIPP where 15
13 years later, it's still a pilot plant? Fifteen
14 years from now, is this interim ventilation system
15 going to continue to operate?
16 MR. FRANCO: That's a very good question
17 because from the very beginning, when this approach
18 was discussed and then as we started to implement,
19 the permanent ventilation system is the key for us
20 to be able to switch from this interim ventilation
21 mode. And depending on the outcome of that, it's
22 going to be critical for us to make sure that that
23 stays on target so that this does and stays as a
24 temporary fix. It's critical for the ventilation
25 system and the habitability of the underground that

1 we move forward with the permanent ventilation
2 system to again not have these temporaries become
3 permanent.
4 MR. SULLIVAN: Well, my experience with
5 Washington, D.C., is that if you actually do it
6 right, you'll get penalized because then it will
7 work fine and somebody in the future will say,
8 "Well, I'm going to save money. I'm just going to
9 stick with this thing."
10 But in any event, just more commentary.
11 Obviously, it needs to be done; right? So I look
12 forward to seeing how the whole system comes
13 together with the right requirements, so that it can
14 operate as a safety-significant system.
15 MR. FRANCO: And again, for me, you know,
16 the WIPP project is a critical asset for the whole
17 nation. Where we are today has shown that we are
18 vital for the nuclear operation in this nation. And
19 so for us to leave temporary systems in place and
20 not go to a permanent ventilation system does not
21 make sense to me. And so I understand the thought
22 there, and I'm pushing hard that that will not
23 happen.
24 MR. SANTOS: I'd like to ask a follow-up
25 question. It is my understanding that some of these

1 interim ventilation systems are not only being
2 procured or actually delivered to the site. Is my
3 understanding correct?
4 MR. FRANCO: Yes.
5 MR. SANTOS: So my question to DOE is:
6 Have you done any inspection that confirms that
7 indeed there are like NQA1-type requirements, or are
8 we waiting for some sort of gap analysis? I just
9 want -- if I were to look at some of the documents,
10 what would I find today?
11 MR. FRANCO: Yes, our QA department and my
12 office has been overseeing that, the procurement of
13 this system. And as we have received them, we've
14 been following and doing the oversight with the
15 contractor as they have started their receipt
16 inspection of what -- so we were involved when they
17 were building this, and we're involved now where
18 it's been delivered.
19 MR. SANTOS: And as a quick follow-up, as
20 you know, design takes time in getting the
21 requirements all mature. It's very important. But
22 have any of your preliminary analysis in support of
23 the new revisions to the DSA, you know, hazard
24 analysis, preliminary, shown the need to actually
25 change some other systems, such as like diesels or

1 the electrical distribution? Any comment on that?
2 MR. FRANCO: I can tell you that we're
3 going through that process now. There's still been
4 a lot of discussion and you know, to get into some
5 very specifics, you know, every one of those systems
6 is being analyzed right now. Looking at the
7 diesel-generated backups for emergency power, that's
8 one of the evaluations. The other one is again the
9 ventilation system that we have in place. But also,
10 looking at the rest of it, we have, you know, the
11 contact handle bay and the remote handle bay that
12 are part of our safety base and making sure, and
13 then the whole underground, looking at those. So as
14 we move through the process, all of those items are
15 open for review and discussion.
16 MR. SANTOS: So when do you expect that to
17 be completed?
18 MR. FRANCO: Oh, we have put a team
19 together, as we talked about that workshop. That
20 safety basis review team has put a strategy and
21 approach together to go through this process, and
22 there's a schedule that shows when each chapter is
23 being done, and we have extended an open invitation
24 to one of your colleagues to be present with us as
25 we go through these processes. And as each chapter

1 is being developed and analyzed, we're going through
2 that. I don't have a schedule in front of me. I
3 could give you the dates of that if you want that at
4 a later time. But right now I don't have those
5 dates.
6 MR. SANTOS: I asked a question, as we go
7 to safety, my experience when we go to safety
8 quality, the lead times tend to be longer, and
9 having a good integration from the beginning is very
10 important, especially as you integrate with your
11 recovery effort. I just wanted to get an
12 understanding of how all that was being, you know,
13 properly integrated. Thank you.
14 VICE CHAIRMAN ROBERSON: Mr. Franco, if
15 you would, if you could provide additional
16 information to answer that for the record, that
17 would be great. We'd appreciate that.
18 MR. FRANCO: Okay.
19 VICE CHAIRMAN ROBERSON: The February 2014
20 events revealed a number of issues -- and this is to
21 Mr. Blankenhorn -- with WIPP's emergency
22 preparedness program. For example, emergency
23 response procedures were not followed, expert-based
24 decision-making created more hazardous evacuation
25 conditions. Critical communications were not heard

1 throughout the underground, and workers had
2 difficulty donning self-rescue devices.
3 What compensatory measures have been
4 implemented to address these deficiencies and ensure
5 that the workers in the underground, as a part of
6 recovery, can adequately evacuate, if necessary, are
7 protected during the recovery work?
8 MR. BLANKENHORN: Thank you, Madam Vice
9 Chairman. I'm actually going to describe for you a
10 phased approach to compensatory measures.
11 Immediately following the events, we did a very
12 in-depth, comprehensive, deliberate review of our
13 safety management programs, including emergency
14 management. And as a result of that, we identified
15 a number of deficiencies and the Accident
16 Investigation Board fire and AIB phase 1 also
17 identified a number of programmatic deficiencies
18 related to emergency management and emergency
19 response.
20 We put in place at that point in time
21 several compensatory measures that included, as Bob
22 mentioned, we went out right after the events and
23 obtained senior management experts from around the
24 complex, and we brought those individuals in to
25 provide mentoring and coaching and oversight of our

1 facility operations. We added conduct-of-ops
2 mentors and coaches to our shift crews. We put
3 senior mentors in the control room to provide
4 assistance and guidance on classification and
5 categorization. And then we added a requirement
6 that our management team conduct and start
7 implementing field management observations and
8 assessments on a routine basis. So we put those
9 steps in place almost immediately.
10 And then we went and we developed a dual
11 path. We recognized that the emergency management
12 program as a result of these assessments, was not
13 compliant; it had not kept up with the NIMS
14 requirements, the national framework; it didn't have
15 incident scene command structure built into it.
16 And so while we were implementing the
17 compensatory measures, we then have started down --
18 and we're probably 60 percent complete now -- with a
19 complete overhaul and revitalization of the
20 emergency management program. We have hired
21 additional staff. We've hired a new emergency
22 management manager who came in with a great deal of
23 experience. We've restructured the organization.
24 We have created new positions compliant with the
25 current standards and requirements in the DOE

1 orders. We've revised procedures and programs.
2 We've trained and qualified these people to their
3 new positions. We've run a number of drills and
4 exercises. We run two or three drills a week.
5 VICE CHAIRMAN ROBERSON: I was going to
6 ask you for an estimate of how many drills you think
7 you have run in the last year.
8 MR. BLANKENHORN: We run two to three
9 drills a week.
10 VICE CHAIRMAN ROBERSON: These are
11 tabletops? Is that what we're talking about?
12 MR. BLANKENHORN: Madam Vice President,
13 these are actual drills. We started early on
14 with --
15 VICE CHAIRMAN ROBERSON: Not Vice
16 President. But thank you.
17 MR. BLANKENHORN: You got my vote.
18 We started early on with tabletops and we
19 focused on the shift managers who were making the
20 decisions and we focused on the radiological
21 controls organization and the emergency management
22 organization. But we quickly moved to full-scale
23 drills that we run in the facilities.
24 We had a process check -- I'd call it a
25 process check. In May we ran a full exercise. It

1 was the first opportunity -- and this is in
2 December -- to look at how far our program had
3 progressed, and it had progressed quite a bit, but
4 it also identified still a number of things that we
5 needed to do to continue to improve on. But it was
6 the first test of our new structure and our new
7 organization and our new processes and procedures.
8 Going forward, we're going to build a new
9 emergency operations center. We're going to
10 continue to involve the organization for full and
11 compliant program.
12 And so that brings me to the second phase
13 of compensatory measures. We put in place in the
14 underground -- or we wrote the document entitled
15 "Emergency Management Fire Protection Compensatory
16 Measures" and that was routed and approved by CBFO.
17 And that included in it a number of things that
18 we're doing in the underground as compensatory
19 measures while we're building this program. And
20 that included things like accountability programs
21 that we needed to implement; it included
22 communications systems that we needed to have in
23 place to allow people in the underground. It
24 restricted the number of people that we had in the
25 underground at any given time. It required detailed

1 prejob briefings to anybody going in the
2 underground. It required fire watch, fire
3 monitoring programs. It required each individual to
4 go through and demonstrate, as part of their
5 training and qualifications, that they could
6 physically don the self-rescuers. It included
7 drills and exercise in the underground where we
8 exercise that, and we select a few people during a
9 drill or an exercise to come out of their RADCON
10 PPE, including PAPR, don their self-rescuer and
11 demonstrate that they can do that in a timely manner
12 and in a safe manner compliantly.
13 So those types of things are continuing to
14 run. We've also implemented a number of other
15 programs in the underground that include new
16 equipment for both fire protection and emergency
17 management, and we are continuing to use the senior
18 mentors that I referred to earlier as part of our
19 overall compensatory measures.
20 So a number of compensatory measures, but
21 it's running in parallel with a revitalization and
22 overhaul of the whole new program. It's coming
23 along nicely.
24 VICE CHAIRMAN ROBERSON: In the major
25 drill, the big exercise you did, what surprised you?

1 What didn't go the way you thought it would go?
2 MR. BLANKENHORN: I think I was a little
3 surprised actually at how well it went.
4 VICE CHAIRMAN ROBERSON: Okay. You're not
5 answering my question, right?
6 MR. BLANKENHORN: But the things that we
7 noted during the exercise were the incident scene
8 command still had not matured to a point yet where
9 it was effective, and so we spent an awful lot of
10 effort and time since then working on the incident
11 scene command program, procedures, training
12 qualifications.
13 And then while the construct of the
14 exercise I think was a positive, on the back end of
15 that, the whole hot wash AAR process, how do we
16 learn, how do we collect, things to improve upon,
17 that part of our drill program I believe was
18 deficient. So I think, you know, clearly that's an
19 area that we need to continue to improve on.
20 VICE CHAIRMAN ROBERSON: Okay. Thank you.
21 Mr. Franco, the Accident Investigation
22 Board identified concerns with the failure to
23 categorize the fire and radiological events as an
24 operational emergency; is that right?
25 MR. FRANCO: That's correct.

1 VICE CHAIRMAN ROBERSON: So what actions
2 have been taken to ensure that proper categorization
3 and notification of events like this occur as
4 intended in the future? What actions have been
5 taken?
6 MR. FRANCO: What has been changed, Ms.
7 Vice Chairman, is we have actually had a procedure
8 change and process and program change and it's
9 back-tied to the emergency management programs we've
10 been discussing. Within that program, the
11 categorization side of the procedure has become more
12 extensive but easier to follow per -- you know, what
13 we're really looking at, as they mentioned, they're
14 talking to facility shift managers. They're the
15 first line of personnel that get to make that first
16 determination so that the notifications go out
17 appropriately and expedited. So one of the things
18 that I have been -- our staff have been overseeing
19 has been the actual implementation of that procedure
20 and making the categorizations of where the --
21 watching the training with the facility shift
22 managers and providing them -- watching the training
23 organization, providing the shift managers a
24 comfortable pathway including from coming from
25 Mr. McQuinn that it's okay to be conservative in

1 your initial response. And in watching that.
2 VICE CHAIRMAN ROBERSON: So let me just
3 ask, it's not -- I mean, we always turn to
4 procedures or we need more specificity. I just want
5 to be clear, because it's my understanding, as well,
6 too, that we need to work on the comfort in making
7 calls like that.
8 MR. FRANCO: That's correct.
9 VICE CHAIRMAN ROBERSON: To make a
10 conservative call if that's what needs to be the
11 call.
12 MR. FRANCO: That's correct. And I can
13 relate to that because I was a facility shift
14 manager here at the WIPP facility before, and as we
15 have discussed and have -- I have seen the
16 oversight, and when I go out at the facility, again,
17 I have an office out there and I've worked with
18 them. They feel real comfortable coming and telling
19 me what's working and what's not. And this has been
20 one of the items that they had expressed that they
21 were feeling more comfortable with this. The other
22 one, as they moved through the whole program, you
23 know, from the emergency management side that they
24 can now make these calls without any kind of
25 questioning, okay --

1 VICE CHAIRMAN ROBERSON: Why do you think
2 they were uncomfortable?
3 MR. McQUINN: Could I have a point, Joe,
4 to that?
5 Joe knows my work force extremely well.
6 But let me relate this to safety culture. So let me
7 connect this back to one of the real root causes
8 that we're working on.
9 In my first week, I was very concerned
10 about why would my shift managers and my shift
11 engineers and my crisis managers be reluctant to
12 categorize and classify and declare an operational
13 emergency? So by the end of the first week, I had
14 met with every qualified shift manager, shift
15 engineer, and crisis manager in private meetings,
16 group meetings, face-to-face. And they convinced me
17 that they felt criticized at times in the past for
18 declaring when it wasn't necessary.
19 And that I think is a commentary on part
20 of the safety culture issue. And so, you know, with
21 Joe's support, it's really my job to get this right.
22 My emphasis has been completely on recognizing
23 people that have the courage to make a conservative
24 decision and stop work.
25 Now, there is accountability for not

1 getting things right. But the emphasis certainly up
2 until now has been all around recognizing people who
3 stop, even if they didn't need to. And so the
4 safety culture piece is hugely important. I think
5 we're making great progress, but we have to protect
6 that all the time.
7 VICE CHAIRMAN ROBERSON: Thank you.
8 Mr. Santos had a follow-up?
9 MR. SANTOS: Yes, quick follow-up. I
10 agree with the Vice Chairman. I think specifics are
11 important. So this question is for Mr. Franco, but
12 others can feel free.
13 So let's go to specifics. I understand
14 your development procedures training, the whole
15 set-up, improvement, initiatives. I think that's
16 good. But what would happen today? Let's say right
17 now, we can postulate an event. What is the
18 expectations today, even as your leadership sits
19 even in this room, what would happen, if you could
20 explain the process in specifics so the public can
21 understand?
22 MR. FRANCO: Let's take a scenario where
23 we have an underground event. Immediate
24 notification to the central monitoring room happens.
25 Central monitoring room sets off the alarm, makes

1 the notification. The facility shift manager goes
2 up to the central monitor room supporting the new
3 application, starts making the notification to all
4 senior staff. Activation of EOC. All of those
5 activities.
6 The activation process then gets
7 initiated, which has been one of the programs that
8 has been enhanced. We now get pager and cell phone
9 tests more than twice a week, and as we get those,
10 you know, how fast can you respond, and so all of
11 that gets initiated right way.
12 That part of it has been tested in the
13 drills, and we actually perform those functions. So
14 that's not something that's simulated. It's
15 actually conducted during these events. So if an
16 event was to happen today, as we're sitting right
17 here, we would get the notification, we would have
18 to tell you that we got to leave, and we would
19 leave. We could -- you know, for me, we would tell
20 you later what was going on as we would go back to
21 our offices there. The joint information center is
22 stationed here at our office. We would activate
23 there.
24 Now, what's coming in the future is, EOC
25 is going to be actually in place here at this

1 facility here in town. As you know, most DOE
2 facilities, their emergency operation center is not
3 located inside that facility itself. WIPP, we did
4 that from the beginning as the pilot, and part of
5 the lessons learned here is that we need to have
6 this segregation. So that would happen immediately
7 from the events. So that's immediate actions that
8 are taken, we would get notified immediately again,
9 so...
10 MR. SANTOS: And a follow-up on that.
11 This is for Mr. Hutton. When will DOE headquarters
12 will come in in this scenario, and when will other
13 like federal and local partners be integrated? And
14 then finally, when will the public be notified? If
15 you can extend --
16 MR. FRANCO: Sure, I can extend.
17 Immediate action is, as soon as the facility shift
18 manager makes notification, the EOC is activated.
19 Once the EOC is activated and the people are in the
20 emergency operations center, the notification to DOE
21 goes off at that moment. There's a DOE
22 representative that has the responsibility to make
23 that call to the headquarters.
24 Then I have a responsibility also to
25 notify my management chain, and Mr. Hutton has

1 provided guidance for us from -- like from the FAC
2 Reps, for them to provide immediate notification.
3 So there's three tiers of notification now that go
4 back to the headquarters, letting them know where we
5 are with activity. And then from the EOC, all of it
6 is governed from the EOC on what needs are required
7 and needed. So if I need some support from outside
8 agencies, everything is coordinated from the
9 emergency operations center following the NIMS
10 process.
11 MR. McQUINN: Jim probably has a thought.
12 So right now we track scheduled drills in our plan
13 of the day meeting. Okay? We track every one. And
14 it takes Jim or my approval to postpone a drill.
15 That's how serious we take it. We run many
16 unannounced drills and we run them when there are
17 people in PAPRs in the radiological area where
18 there's real risk of running the drill with people
19 down in panel 6 or panel 7, but we do it anyway,
20 because it's important.
21 So the unannounced drills, it takes Jim or
22 me to approve those. Nobody else know it's going to
23 happen. And we run those.
24 And then finally, in terms of me becoming
25 a little more comfortable that the shift managers

1 will make a conservative call, about a month ago, we
2 had an off-site oil release, but it was on the
3 property. And it turns out -- and we ran that and
4 we activated the EOC and we ran the EOC for several
5 hours, and then later we concluded that we probably
6 didn't need to do that. But we still thanked the
7 shift manager and the crisis manager for making a
8 conservative call.
9 Now, we learned a lesson in terms of when
10 do you need to and when do you not need to. But in
11 that case there was no reluctance to actually run
12 the EOC for several hours before we were comfortable
13 that we didn't need to be activated. So I don't
14 want to become complacent, but I'm becoming more
15 comfortable that conservative decision-making is
16 understood as an expectation.
17 MR. BLANKENHORN: I would just add, Mr.
18 Santos -- okay. So a couple other things I'd just
19 like to add to what Joe described. So Joe described
20 when the CMR gets the notification, they start to
21 take actions. And the first thing they do, because
22 they have been trained and qualified, is they take
23 immediate actions, but someone in the control room
24 is opening up the procedures and following step by
25 step the requirements for immediate action. The

1 organization itself, though, so all the workers, are
2 taking immediate action in response to the event,
3 whether that's evacuation or shelter in place.
4 And then, as Joe mentioned, as we follow
5 through on your question about the notifications,
6 there are specified requirements for how long we
7 have to notify DOE. I believe, Joe, it's 15
8 minutes, isn't it, that we have to get something up
9 to DOE? But that's spelled out and you know, it's
10 one of the action steps in our response procedures.
11 There's also, then, requirements I think
12 within 30 minutes for us to make notifications by
13 phone and by fax to local enforcement, to local
14 emergency management centers, to the state emergency
15 management. So we call all of the action officers,
16 the on-call action officers, who then are
17 responsible for making the notifications to the
18 actual staffs of the emergency management systems.
19 VICE CHAIRMAN ROBERSON: I think we're
20 going to scrub this some more in the evening
21 session, I mean, because these were in place before.
22 I mean, they're not new. So I think what we're
23 going to want to do later is dive into what is
24 different.
25 So Mr. Sullivan.

1 MR. SULLIVAN: Thank you. So Mr. Hutton,
2 we heard about some changes within CBFO to improve
3 their performance. So my question to you now is:
4 Is the EM satisfied with the structure of the field
5 offices that exist now? Do we have the right
6 division of responsibilities within the office? Do
7 we have the right number of people? Do those people
8 have the right skills, training, experience, et
9 cetera?
10 MR. HUTTON: I think we're quite happy
11 with the change in the organization that's been
12 described, you know, separating the oversight
13 function from the production. I think that was
14 essential. It was a good change. I think that's
15 beginning to work well.
16 I'm quite pleased with some of the folks
17 that have been brought on board. We've participated
18 in the hiring process, interviews, and so on, for
19 the folks that have been recruited and brought into
20 CBFO. Some of them are quite strong, have a lot of
21 experience of other facilities in the complex, and
22 they bring that to bear in this at CBFO. So I think
23 that's very positive.
24 I have not been happy that we've been able
25 to hire people quickly enough. It's been difficult

1 to bring -- to attract people to be, you know,
2 willing to come to this area. That's frankly been a
3 bit of a problem. And I would like to see more of
4 those folks in place, but I'm quite encouraged with
5 the number of the people that have been brought in
6 and their skill and abilities. I think they're
7 strong.
8 So was there something else?
9 MR. SULLIVAN: No. I have some follow-up
10 questions, taking those things one at a time. So
11 with respect to dividing the responsibilities
12 between programmatic responsibilities and oversight
13 responsibilities, is this something that's been
14 instituted throughout the DOE complex?
15 MR. HUTTON: Most all -- there is no
16 specific requirement about that that I'm aware of.
17 However, most all sites have that kind of
18 separation. Most all sites that I'm aware of have
19 that kind of structure.
20 MR. SULLIVAN: Okay. My experience is, it
21 doesn't magically fix things. In some cases you
22 just end up with a little bit of head-butting
23 between two groups.
24 MR. HUTTON: Well, perhaps there should be
25 a little bit of a healthy tension there. I think

1 that would be appropriate. But I do think it's
2 important that just -- that folks understand their
3 clear role and responsibility. And sometimes, you
4 know, they have to take off one hat and put on
5 another. Do it too many times, pretty soon they
6 forget which hat they're wearing. So I think it's
7 helpful. I think it's helpful to have that
8 structure.
9 MR. SULLIVAN: All right. So with respect
10 to some of the hiring issues, Mr. Franco, can you
11 comment? Are there things that you'd like to see
12 Mr. Hutton do back in Washington to fix some issues
13 here?
14 MR. FRANCO: We have actually been working
15 that issue from the start with and have had great
16 support from Mr. Hutton as our driver in D.C., so
17 that's been a positive. I can tell you that it
18 hasn't been without effort there. The amount of
19 offers that have been made and the incentives that I
20 have been provided, to be able to provide -- I have
21 the highest incentive authority right now for the
22 work force as I hire them, and we are maxing them
23 out, and they still are coming back and saying, "No,
24 you know," and I'm getting various things from, you
25 know -- that includes just -- what's within this

1 region, there has been for medical reasons and
2 there's also been, because of the economy here, the
3 housing market is a lot higher than where most
4 people are wanting to come from. So that becomes a
5 challenge for them to be able to accept that. With
6 the boom in oil, even bringing them in and even
7 seeing the hotel prices, which have started to come
8 down some, but those have been some challenges that
9 we have.
10 And we track this and we report it to
11 headquarters on a weekly basis. I know that my
12 management team, Mark Whitney and company, have
13 monitored this. They're trying to help us as much
14 as they can. The postings are going out as fast as
15 they can, and then you know, when you have four
16 turndowns on a specific -- even in a grade 14 level,
17 that's huge. And so it's just those kinds of
18 things.
19 Now, what we have been really fortunate
20 with is, we have brought in a lot of good people for
21 the nuclear safety side of the house and the
22 oversight piece. So you know, I have a senior
23 nuclear safety technical advisor now, and he has
24 definitely -- and he's leading this, and the safety
25 basis review team, and if you get the chance to talk

1 to your staff, he has really taken control of this
2 and has been a great leader in that side.
3 And then again, the efforts that we're
4 doing to try to get the employment levels up --
5 we're still about -- the organization is going to
6 change over 50 percent, so it's a totally -- it will
7 be a totally new organization when we're done.
8 We're going from about 50 to all the way to 77 type
9 amount. And then I'm having attrition also as that
10 happens. So a huge turnover from the concept of new
11 folks coming in. And most of them -- all of them
12 are not born and raised in Carlsbad, like we have
13 currently a pretty good setup.
14 So that hiring process is still a
15 challenge for us, and we have advocates up in
16 headquarters, including Mr. Hutton, that really
17 drive and help us through those processes. Wherever
18 we get a hang-up on anything that drives that,
19 whether it's human capital or any of those -- and
20 we've been just moving through this process and
21 making sure that we stay within the requirements of
22 the hiring process, but it's been a challenge.
23 MR. SULLIVAN: Well, short of trying to
24 destroy the local economy to help yourself, are
25 there other things that you can do? For example,

1 are some of these programmatic functions -- can
2 somebody back in Washington do some of these things?
3 MR. HUTTON: Yeah, and that's exactly what
4 we've been doing, is supplementing CBFO staff with
5 our staff, with staff from other sites, and with
6 some contractor support, as well; very strong
7 people, frankly, that have been spending a great
8 deal of time doing nothing but worrying about WIPP
9 and helping out performing on some of these
10 functions. But that's not a good long-term
11 solution. You know, but it certainly is necessary
12 right now. And so that's what we've been doing.
13 MR. SULLIVAN: All right. Thank you.
14 VICE CHAIRMAN ROBERSON: Thank you,
15 gentlemen. I don't have any additional questions.
16 Mr. Sullivan, any more questions from you?
17 MR. SULLIVAN: I'm probably done.
18 VICE CHAIRMAN ROBERSON: I'm done for this
19 at this point. If you want to go back to --
20 MR. SULLIVAN: Well, yes. Let me go ahead
21 and go back, then. Go ahead.
22 MR. SANTOS: Can I interrupt? A follow-up
23 question to your last question.
24 MR. SULLIVAN: Certainly.
25 MR. SANTOS: It's just for the record. I

1 would like to get on the record: What is your
2 current shortage from a staffing standpoint?
3 MR. FRANCO: Right now, we -- to meet, you
4 know, the where we were headed with our current
5 organization, 18.
6 MR. SANTOS: Eighteen?
7 MR. FRANCO: So we've had, you know,
8 hired -- initially we had 22. We've hired nine new
9 personnel, but I had five attrit, and then -- yeah.
10 MR. SANTOS: Thank you.
11 VICE CHAIRMAN ROBERSON: Mr. Sullivan.
12 MR. SULLIVAN: Mr. McQuinn, you mentioned
13 earlier some preventive maintenance issues that were
14 brought out in specifically the fire accident
15 investigation report. So as I recall from that
16 report, it was like a whole page of things that were
17 being done on, for example, the salt trucks that had
18 the fire. There was a whole page of things that
19 were being done here at the site by the maintenance
20 organization that were different than what the
21 manufacturer had recommended, so different
22 periodicity, what they were using, different
23 equipment, or instead of washing down the truck with
24 water, they were using compressed air. Can you talk
25 about how it got to be that way and what's been done

1 to change that?
2 MR. McQUINN: The overall preventive
3 maintenance or that specific --
4 MR. SULLIVAN: Yeah. The overall
5 preventive maintenance program.
6 MR. McQUINN: So I think there is no doubt
7 that we weren't putting the priority, both
8 financially and organizationally, in day-to-day
9 execution on preventive maintenance, particularly
10 safety-related preventive maintenance. And so one
11 of the new managers, new experienced managers that I
12 brought in was to take over the maintenance
13 organization, and this is an individual who has
14 particularly a high experience base from Pantex with
15 respect to both deferred maintenance and replacement
16 of critical equipment. So we have a new leader to
17 make sure that we execute the preventive maintenance
18 properly. Of course, we'll talk a lot more about
19 work planning and control, and that plays a part in
20 making sure that we're ready to do preventive
21 maintenance when it's needed.
22 So a new manager, a lot of emphasis on the
23 execution of the work.
24 But I think part of the root cause was --
25 as my organization made hard priority decisions,

1 there wasn't enough priority on preventive
2 maintenance. Okay? One of the tools that I'm going
3 to use is a brand-new standard that AECOM has
4 produced based on all the best practices from all of
5 the projects, and nobody has it exactly right. I'm
6 going to adopt a new standard on how to evaluate
7 preventive maintenance and make important priority
8 decisions.
9 And then we've launched as part of our
10 baseline an improved integrated priority list to
11 make sure that Jim and I understand what decisions
12 we have to make with the funding and the resources
13 that we have.
14 And then sort of from a process
15 standpoint, in the last two months I have added one
16 more, one last direct report to me, and I call the
17 function project integration. And so I'm borrowing
18 a very experienced project integration manager from
19 Savannah River. But I think that function I need to
20 keep us honest as we look right now at a very good
21 funding scenario and how to spend that money not
22 only on recovery but on infrastructure things that
23 are needed.
24 And so I have created a new function with
25 an experienced person, so I think that the

1 decision-making around what to put priority, both
2 money and resources, on and then the maintenance
3 manager to execute that well when we give it
4 priority. So those are some of the things we've
5 already done and some things that are yet to come.
6 MR. SULLIVAN: All right. So some of the
7 examples were, for example, battery maintenance
8 required at 250 hours, and instead it was being done
9 at 500 hours. If for some reason somebody in the
10 organization today wants to do something like that,
11 the manufacturer says this should be the periodicity
12 and they believe they're going to use a different
13 periodicity, what's required to get that approval?
14 MR. McQUINN: Well, I think the
15 maintenance process is adequate. I think the piece
16 that was primarily missing that most of the mature
17 sites have is, there is a strong cognizant system
18 engineering program and system engineering program
19 up in -- a year ago the system engineer didn't have
20 to be involved in making the decision or agreeing
21 with the decision to defer the maintenance on a
22 battery from 250 to 500 hours.
23 Now, we're still early in getting
24 cognizant system engineers qualified and in place,
25 but what we're adding to the process is engineering

1 has got to step up; not that the maintenance guys
2 don't have good reasons to consider a change like
3 the one you discussed, but I have got to have an
4 honest broker, and that's my system engineer,
5 involved in assuring that that's defensible,
6 particularly for the safety-related preventive
7 maintenance.
8 MR. SULLIVAN: And when it comes time to
9 do the maintenance, then, who is responsible, other
10 than the worker who gets assigned to do the
11 maintenance, to make sure it gets done right? Is
12 there somebody who's going to be watching
13 periodically or some sort of random check to make
14 sure that when the maintenance is done, we're using
15 the right equipment, we're not taking shortcuts, we
16 are doing what's supposed to be done? How is that
17 process going to work?
18 MR. McQUINN: Well, let me start. Jim,
19 you help me remember what I'm overlooking.
20 The maintenance line organization is
21 primarily accountable to me to make sure that
22 they're looking at the quality of their work. If
23 it's a safety-related credited system, then there
24 better be some kind of surveillance related to that
25 maintenance that proves that the functionality

1 that's required has been achieved.
2 And then ultimately, for all of us,
3 including myself, that have to get into the field,
4 right now all of my emphasis as we go into the field
5 is going to be around technical safety requirement
6 compliance, but there will be times when I'll
7 instruct the whole senior team, "When you go out
8 this week and you do your field monitored assessment
9 and you report that back to me, take a look at PMs
10 that are going on."
11 And so it starts with the line
12 organization. There is an engineering oversight
13 part when it's safety-related, and then it's all of
14 us that do field observations.
15 MR. BLANKENHORN: Yeah, I think the only
16 thing that I would add is the work packages
17 themselves, depending on the piece of equipment and
18 the maintenance required, will spell out exactly
19 what Bob just described, which is that there may be
20 independent verification steps, QA, hold points,
21 peer verification, supervisor requirements. And so
22 those are being documented and it will be captured
23 in the actual work control documents to ensure that
24 the work is being done in accordance with the
25 requirements.

1 MR. SULLIVAN: Thank you. You have a
2 follow-up?
3 MR. SANTOS: I have a follow-up. I would
4 like to direct a similar line of questioning to --
5 Mr. Dunagan can probably pick up on this one.
6 What is the oversight role of DOE when it
7 comes to this example that Mr. Sullivan highlighted
8 regarding some of the identified gaps between actual
9 practice and manufacturing and maintenance? Are you
10 solely relying on the contractor system, or are you
11 actually going to be performing independent
12 oversight gap analysis? Can you elaborate what some
13 of your actions are regarding this item?
14 MR. DUNAGAN: Yes, I will. Thank you very
15 much for the question. Yes, DOE is actively
16 involved with the oversight of these activities. We
17 have FAC Reps here onsite who are involved with all
18 of the oversight, as well as the different members
19 of the operations oversight organization. They are
20 continuously following and monitoring the
21 situations, as well as maintenance, and whenever
22 vehicles are being maintained, DOE is notified and
23 they are involved and included in the -- they have
24 the opportunity to include in the prejob or the plan
25 of the day meeting, so they can be aware of all the

1 activities that are going on and be able to be
2 involved with them as much as possible, as well as
3 being involved with the oversight of all the
4 documentation that goes on with it.
5 Joe might have more to add to this.
6 MR. FRANCO: I can add to that. In our
7 organization, it's not just the oversight group. I
8 have an independent quality assurance program that
9 is deeply engaged with that, and what we do is, from
10 the construction of any of the, you know, purchases
11 that are being done, our quality assurance
12 department is engaged, we send people out in the
13 field wherever the manufacturing is happening, and
14 we provide those.
15 Also, we have a planned inspection and
16 evaluation program that we perform out at the site,
17 including anything from conduct of operations at the
18 SMS to work packages. So they go out. And then
19 they also monitor the CAS system for the contractor.
20 Also what we do is, as we're moving
21 through the year, if we see a trend on something, my
22 quality assurance director or manager comes in and
23 tells me, "We're seeing a trend in this, and let's
24 get with the director there and let's put some focus
25 on this activity."

1 And that's a program that is in place
2 today.
3 MR. SANTOS: Thank you. I'm done.
4 VICE CHAIRMAN ROBERSON: Thank you,
5 Mr. Santos.
6 Any additional questions, Mr. Sullivan?
7 MR. SULLIVAN: No.
8 VICE CHAIRMAN ROBERSON: Mr. Santos?
9 MR. SANTOS: No.
10 VICE CHAIRMAN ROBERSON: Thank you,
11 gentlemen. Mr. Hutton, Mr. Franco, Mr. Dunagan,
12 Mr. McQuinn, and Mr. Blankenhorn, thank you for your
13 time and you're excused from the table at this time.
14 At this time, per the Board's practice and
15 as stated in the Federal Register notice, we will
16 welcome comments from interested members of the
17 public. A list of those speakers who have contacted
18 the Board is posted at the entrance to this room.
19 There is also a table at the entrance to the room
20 with a sign-on for members of the public who wish to
21 make a statement but did not have the opportunity to
22 notify us ahead of time. If you wish to make a
23 statement and have not signed up, you may add your
24 name to the list at this time.
25 So I think I don't see any movers, so it

1 appears to me -- we have the list of the speakers,
2 and we will call them out in the order in which they
3 wish to speak, in the order that they signed up.
4 I ask you to make sure everyone who has
5 demonstrated a desire to speak -- we ask speakers to
6 be brief to allow time for others. The Chair may
7 interject if a speaker exceeds five minutes, but
8 will then give consideration for additional time
9 should the agenda permit.
10 Statements should be limited to comments,
11 technical information, or data concerning the
12 subject of this public meeting and hearing. The
13 Board members may question anyone making a statement
14 to the extent deemed appropriate.
15 As a reminder, anyone, including those
16 observing today's hearing live via videostreaming,
17 may submit a written statement to the Board to be
18 included in the record, which is open until May 25,
19 2015. Contact information for submitting a
20 statement is available on the Board's website.
21 We want to thank all the members of the
22 public who have come here and been a part of these
23 discussions today. And so the first person on my
24 list is Mr. Don Hancock.
25 MR. HANCOCK: Thank you, Madam Chairman

1 and members of the Board. I appreciate very much
2 your being here, as well as the Board's work over
3 the last many years around the DOE facilities and
4 sites, and I look forward hopefully to continued and
5 further involvement of the Board with WIPP, which I
6 think is very important.
7 My name is Don Hancock. I'm with
8 Southwest Research and Information Center, a
9 44-year-old nonprofit organization based in
10 Albuquerque.
11 Among other things, we've been watching
12 WIPP for more than four decades. I want to
13 address -- and given the shortness of time, I want
14 to address a couple of issues related to the
15 recovery plan elements that have been talked about
16 today, and then spend briefly some time on what I
17 think is a very fundamental flaw in the entire
18 recovery process and to get the safety culture back
19 in place.
20 So regarding safety, on February 15th and
21 16th, after the radiation release, DOE and Nuclear
22 Waste Partnership assured workers and the public
23 that there was no contamination of workers'
24 equipment or facilities on the surface.
25 It wasn't until February 19 when the only

1 independent monitoring at the time, the Carlsbad
2 Environmental Monitoring and Research Center,
3 released their information from their sampling on
4 the surface that there was contamination released.
5 That shows me a couple of things that I
6 think are important. One, the problems with
7 radiation monitoring and detection of DOE and
8 Nuclear Waste Partnership. It also shows the
9 importance of independent monitoring, which is very
10 important going forward.
11 I appreciate what the Board is doing today
12 in terms of talking to DOE and the contractors, but
13 that's not sufficient for safety, and I think this
14 incident clearly indicated. So among the things
15 that needs to happen going forward that hasn't been
16 mentioned today is the continuing funding for CEMRC,
17 as it's called, the Carlsbad Environmental
18 Monitoring and Research Center, and the New Mexico
19 Environment Department to have independent
20 monitoring actually functioning at the surface in
21 addition to what's required by DOE and the
22 contractor.
23 Another thing that resulted in that is:
24 Workers were told that they weren't contaminated
25 when they were, and in at least one case it was

1 three months after the event before the worker was
2 notified.
3 So those are very unacceptable practices
4 that have to be not only fixed but demonstrated that
5 they're fixed, not just, you know, on paper, et
6 cetera. So that's very important, going forward in
7 terms of the safety questions.
8 In terms of regulatory compliance, which
9 there hasn't been much discussion today, the
10 recovery plan states that by March of 2015 -- in
11 other words, a month ago -- on page 16, the EPA
12 recertification has to have been completed. That
13 not only hasn't happened, there isn't even a
14 complete application to the Environmental Protection
15 Agency for recertification.
16 So one of the important questions in terms
17 of regulatory compliance is: What is the role of
18 recertification in EPA approval for any reopening of
19 WIPP?
20 Obviously, the other important regulatory
21 body is the New Mexico Environment Department.
22 There are numerous ongoing permit violations of the
23 existing permit. The recovery plan unfortunately
24 presumes that the facility can reopen next year with
25 many violations, health and safety violations, of

1 the permit still in place.
2 That's an unacceptable position from a
3 health and safety standpoint, from a regulatory
4 standpoint, and from a public confidence standpoint.
5 So one of the things that needs to happen is the
6 recovery plan needs to be changed, DOE headquarters
7 needs to specifically say that those kinds of
8 modifications have to be done, and compliance with
9 the permit has to be in place.
10 Important to both of those things that I
11 just mentioned is, it is not possible for all of
12 those things to be done with EPA and New Mexico
13 Environment Department in the first-quarter-of-2016
14 schedule that's in the recovery plan and you heard
15 referred to again today.
16 On the one hand, we're told over and over
17 we're not schedule-driven, but the recovery plan,
18 which is the headquarters document that's out there
19 says that that is the schedule. So among the other
20 things that needs to happen is that headquarters
21 needs to agree now and soon that that's not the
22 schedule, not just say we're not schedule-driven;
23 they actually need to physically change the schedule
24 in the recovery plan.
25 I guess the other thing I want to mention

1 in terms of these regulatory processes, these are
2 the processes that the public is engaged in, and
3 must be engaged in, and will be engaged in, and you
4 can't short-circuit the timing and the nature of
5 those processes.
6 Let me talk briefly about this one
7 fundamental flaw that I referred to that hasn't been
8 addressed. A fundamental cause of the declining
9 safety culture and these releases is the fact that
10 what I call the internal pressure. In your Federal
11 Register notice you talked about external pressures
12 for schedule and to not comply with safety
13 requirements.
14 There is a very essential internal
15 pressure that's going on and has been going on
16 recently that I and other people noticed and knew
17 that the safety culture was declining, and that is
18 the Department of Energy and its contractors is very
19 focused on expanding the WIPP mission, not complying
20 with the Start Clean Stay Clean safety mission that
21 it's required to do under law and under every other
22 practice.
23 We're 14 months after the February 2014
24 release, and DOE still has five, count them, five
25 formal environmental impact statement processes

1 going on to expand the WIPP mission for high-level
2 waste tanks -- waste from high-level waste tanks at
3 Hanford; commercial waste from West Valley, New
4 York, greater than class C commercial waste from
5 reactors around the country, the surplus plutonium
6 from the Savannah River site, and a fifth one that
7 isn't even related to nuclear, bringing 10,000
8 metric tons of mercury to store on the surface at
9 the WIPP site. And in addition, they want to do
10 heater tests in the underground at WIPP to
11 demonstrate the site for high-level waste.
12 So all of these expansion things take
13 time, effort, money, management and attention from
14 both headquarters, DOE, CBFO, and the contractors to
15 do these things. It is no surprise that they can't
16 focus on the safety mission. Unfortunately, none of
17 those six things has been formally dropped or
18 rejected. They're still out there, and my strong
19 view is that headquarters has to formally reject all
20 of these expansions, most if not all of which are
21 also illegal under existing laws and permits, before
22 we can talk about reopening the facility, reopening
23 the facility for what? Not to be a safe facility.
24 VICE CHAIRMAN ROBERSON: Mr. Hancock --
25 MR. HANCOCK: I understand. My time is

1 up.
2 VICE CHAIRMAN ROBERSON: Okay.
3 MR. HANCOCK: So this is very important
4 that headquarters needs to make these changes to the
5 recovery plan and to their decision-making process,
6 and the kinds of things WIPP is being designed for.
7 Otherwise, we're not going to focus on the WIPP
8 mission; we're going to focus on expanding WIPP to
9 do other things. Thank you.
10 VICE CHAIRMAN ROBERSON: Thank you, sir.
11 And if you would like to submit a document for the
12 record, we'd be glad to take that, as well.
13 Our next speaker is Kyle Marksteiner.
14 MR. MARKSTEINER: Good afternoon. My name
15 is Kyle Marksteiner, and I'm a contractor to the
16 mayor's Nuclear Task Force. I actually have a
17 two-page letter from Mr. John Heaton. If it's
18 permissible, he wanted me to read that for the
19 record, if that's okay with you.
20 VICE CHAIRMAN ROBERSON: Absolutely.
21 MR. MARKSTEINER: Slowly. Okay. I talk a
22 little fast.
23 VICE CHAIRMAN ROBERSON: You can also
24 summarize it and submit the actual document.
25 MR. MARKSTEINER: Okay. I want to leave

1 it in his words, or he'll be upset with me. But
2 I'll do the best I can.
3 Good afternoon, esteemed members of the
4 Defense Nuclear Facilities Safety Board, and thank
5 you very much for holding this hearing in Carlsbad.
6 Vice Chairman Roberson, I'm sorry I missed
7 seeing you, and thank you for being here. We
8 recognize that the rarity of such a public hearing
9 indicates the significance of both the Waste
10 Isolation Pilot Plant itself and the severity of the
11 mistakes that led to last February's fire and
12 radiological incident.
13 I know all of you must feel deeply ashamed
14 that you didn't enforce your fire findings at WIPP
15 or that you failed to identify the shortcomings of
16 the waste treatment process or poor AK documentation
17 of that treatment at Los Alamos, as well as the
18 incompetence of the CCP programs there and at CBFO
19 to identify and assure how that treatment was
20 occurring.
21 Certifying waste for disposal at WIPP that
22 does not meet the WIPP WAC is inexcusable. It
23 shakes the very foundation of trust and moral
24 responsibility to one's fellow man. I apologize for
25 not being there today, but I have a prior commitment

1 I am unable to get out of. I hope this hearing is
2 productive, and look forward to watching the
3 archived online broadcast.
4 My message today is to emphasize the
5 absolute need for transparency, at the WIPP level,
6 in Washington, D.C., for regulators, and yes, for
7 the DNFSB. Transparency is not passive. For many
8 years the DNFSB indicated concerns about a possible
9 fire at WIPP in letters to the Secretary of Energy
10 that were admittedly published on the website.
11 However, the back-and-forth discussions on these
12 concerns and their apparent lack of resolution were
13 not brought to the public's attention and obviously
14 not resolved in spite of corrective action
15 responses.
16 While I understand that your primary
17 mission is to report to the Secretary, the reality
18 is that we live in an area where the media, the
19 public, and host communities need to be directly
20 brought into the discussion to make sure changes are
21 made. It is true that we could have found your
22 letters on the web page and made a bigger deal of
23 them to local WIPP management or our congressional
24 delegation, but we are also very busy people and we
25 feel you are the experts.

1 I hope the DNFSB and all regulators will
2 strive to do a better job of bringing the message
3 directly to the community. The public should be
4 informed immediately and directly after every visit
5 you make to the site in the form of an exit
6 conference when the public -- when your findings or
7 judgment of safety breaches against WIPP are
8 reported directly. You should then report the
9 response by WIPP in the way of corrective actions,
10 the intent to implement -- getting close -- and
11 whether responses are adequate. We should then have
12 a minimum of a monthly report from you to the mayor
13 as to which corrective actions are completed and
14 which are outstanding. Too often we hear about some
15 concern and then never get the follow-up about
16 whether it was addressed or why it was not
17 addressed.
18 Furthermore, this information from your
19 findings should be presented in a way that is
20 understandable to the public, not recorded in a way
21 where even people directly involved have trouble
22 understanding the concern. Many of these concerns
23 tie in with our attempt to develop a community
24 assurance program. Vice Chairman Roberson, I was
25 gratified by our meeting in DC several months ago

1 when you agreed that the DNFSB would be pleased to
2 participate in such a program. You pointed out
3 several instances where there may be inconsistencies
4 between regulators, and such a meeting of these
5 regulators would allow those and others to be
6 cleared up, as well as finding gaps in oversight.
7 We don't believe introducing a new
8 regulator to WIPP is the solution, so much as we
9 think the focus should be to tie in the existing
10 regulators, eliminate the "silo effect," caused by
11 each group handing its own process and sometimes
12 missing key issues, and finally turning these
13 reports into something that is digestible by the
14 public.
15 We appreciate your willingness to be part
16 of this community assurance program, and we
17 understand its development is part of the State of
18 New Mexico's negotiations with the Department of
19 Energy.
20 As a closing statement, the final goal
21 here is the restoration of the Waste Isolation Pilot
22 Plant. The salt beds in that area have and will
23 continue to do their job. This is an exceptional
24 resource for the permanent disposal of transuranic
25 waste. We just need to keep working to eliminate

1 human error.
2 Thank you again for being here today.
3 John Heaton.
4 Thank you.
5 VICE CHAIRMAN ROBERSON: Thank you,
6 Mr. Marksteiner.
7 Our next speaker is Russell Hardy.
8 MR. HARDY: Good afternoon, and welcome to
9 Carlsbad, and thank you for taking your time.
10 My name is Russell Hardy, and I am the
11 director of the Carlsbad Environmental Monitoring
12 and Research Center, also known as CEMRC for short.
13 For those of you who don't know, we are an entity of
14 New Mexico State University. We are funded by the
15 Department of Energy to conduct an independent
16 environmental monitoring program of the WIPP site on
17 behalf of the citizens of Carlsbad and southeast
18 New Mexico. And I want to thank Mr. Hancock for
19 acknowledging CEMRC and advocating for future
20 funding for our cause.
21 One of our missions is to make all of our
22 information available to the public. And that's
23 very important to us, whether it's good, bad, or
24 indifferent.
25 Just a little history on CEMRC. We began

1 our environmental monitoring activities in 1997,
2 which was about two years before any waste was
3 emplaced in the underground at WIPP. What that did
4 was allowed us a good baseline of about two years to
5 establish normal or background radiation activities
6 from thence we would compare all post-operational
7 activities to. And for about 15 years, we had to
8 look to the tenth decimal place in order to find any
9 activity. In fact, for 15 years, we found
10 absolutely zero impact to the environment, as a
11 result of the WIPP waste emplacement activities.
12 Of course, that pertinent track record
13 ended on midnight of February 14, 2014. As
14 Mr. Hancock mentioned, the CEMRC was the first
15 entity on February 19th to announce that trace
16 levels of radioactive contamination, primarily
17 americium 241 and plutonium 239/240, have been
18 detected at an ambient monitoring station located
19 approximately half a mile northwest of the facility.
20 Since that time, CEMRC has collected more
21 than 1,000 environmental samples consisting of WIPP
22 exhaust air, both before and after HEPA filtration,
23 ambient air on and around the WIPP facility, soil
24 samples collected near the WIPP facility, and
25 surface water and sediment samples collected from

1 the three public reservoirs in our area.
2 In addition to our environmental
3 monitoring activities, we have a whole-body counter
4 at our facility that we use to count the radiation
5 workers at the WIPP site, but that we also open up
6 to the public for free whole-body counting services.
7 Since the WIPP release event, we've counted
8 approximately 185 WIPP workers and approximately 70
9 public citizens, all looking for the presence of
10 WIPP-related transuranic isotopes.
11 Based on all of these sampling activities,
12 both the environmental and the WIPP workers and the
13 public citizens, I can unequivocally state that the
14 safety-related aspects of the repository worked as
15 designed, maybe not perfectly, but they worked and
16 they mitigated the release to the environment and
17 that we have found no detrimental impact to the
18 environment or to public health.
19 This is not to say that there were not
20 problems or issues or that the operational and
21 radiological responses to the event worked
22 perfectly. Obviously, as we've heard today, there
23 were many problems. But it is my belief that many
24 of these have been or are being addressed at this
25 time.

1 From my perspective from being involved
2 with the activity both before the event as well as
3 being very closely involved after the event, I do
4 believe that there's considerable progress being
5 made primarily in the areas of transparency,
6 communication, both with the public stakeholders as
7 well as WIPP regulators and with CEMRC as a whole.
8 I think that the training for contractors
9 and employees has been strengthened considerably,
10 and I think that the radiological characterization
11 and radiological response is being improved as we
12 speak.
13 Like Mr. Sullivan, I did not get a
14 telephone call alerting me to the fact that there
15 was a release at the WIPP site. I found out about
16 2:00 on Saturday afternoon from a Facebook post.
17 But since then, I have been invited to participate
18 on what was at one time daily teleconferences with
19 WIPP regulators and is now weekly, and I get all
20 kinds of e-mail notifications, text messages,
21 personal phone calls, anytime there's going to be
22 some type of an operational change that may lead to
23 a release at the WIPP site.
24 So while I do believe that much remains to
25 be done in order to have the entire complex ready

1 for a resumption of waste emplacement activities, I
2 am pleased with the progress that's been made to
3 date, and I am confident that waste emplacement
4 activities will resume and will be performed in a
5 safe and efficient manner. Thank you.
6 VICE CHAIRMAN ROBERSON: Thank you,
7 Mr. Hardy. Thank you so much.
8 Our next speaker is Scott Kovac.
9 MR. KOVAC: Thank you, Madam Chair and
10 members of the Board. Welcome to New Mexico. My
11 name is Scott Kovac, with Nuclear Watch New Mexico.
12 I would just like to say that there was a
13 lot of talk about safety bases today, and it's my
14 understanding that safety bases are due to be
15 updated annually and the question is, you know, what
16 was the current status of WIPP's safety basis at the
17 time of the accident?
18 I do know that recent reports for
19 Los Alamos' safety basis show that they're all two
20 or three years out-of-date, and this was a problem
21 in the past, and the Board through their efforts and
22 other people for a brief time in 2012, most of the
23 safety bases were all updated, and they seem to be
24 slacking off again. And this just kind of shows,
25 you know, the attention, the constant attention,

1 that needs to be paid to these issues.
2 The DNFSB has a long history of
3 questioning corrective action measures with their
4 sites, with the DOE sites. The corrective action
5 plans and measures are all maybe very detailed but
6 the follow-through is historically what's been
7 lacking. Your weekly site representative reports
8 from your hardworking site reps are just littered
9 with, you know, corrective actions that were in
10 place for many, many things, but, you know, they're
11 not so much about this one worked or this one was
12 followed through. They're all just, you know --
13 just seems like the immediate reaction of a site is
14 to say, "Well, we'll do a corrective action." And
15 you know, the follow-through just seems to be
16 lacking.
17 So I would request that the WIPP, you
18 know, not open until all the corrective actions for
19 the WIPP site are implemented. And in the AIB, the
20 phase 2 report, there were 40 judgments of needs,
21 and I can only imagine the corrective actions that
22 those will generate. Very many, I would think, for
23 each one.
24 I would request that, you know, all those
25 be met, too, before WIPP reopens, because if safety

1 is the priority, all those judgments of needs need
2 to be addressed and verifiable, and that's why I
3 would ask the Board, if there's any way possible
4 that you could certify or verify the judgments of
5 needs that the AIB 2, phase 2, you know, came up
6 with, that you know, if you guys could certify or
7 verify that, that would be most helpful, because the
8 public has no way of knowing what happens when those
9 corrective action plans are implemented.
10 Thank you.
11 VICE CHAIRMAN ROBERSON: Thank you,
12 Mr. Kovac.
13 Are there any other speakers, any other
14 members of the audience that would like to speak?
15 Seeing no movement, thank you all for your
16 comments. And at this time as noticed in the agenda
17 we will take a recess. The Chair calls a recess of
18 this public hearing. We will reconvene at 5:30 p.m.
19 Thank you.
20 (Recess from 3:57 p.m to 5:31 p.m.)
21 Session 3
22 Panel Discussion: Actions Necessary to Safely
23 Conduct Waste Operations
24 VICE CHAIRMAN ROBERSON: Welcome back,
25 everyone. I would like to call this hearing to

1 order. Let's begin a third session of today's
2 proceedings which will focus on DOE's actions to
3 safely resume waste operations at WIPP. During the
4 session the Board will explore DOE's plans for
5 correcting deficiencies and safety management
6 programs such as emergency management, maintenance
7 and engineering, fire protection, and nuclear
8 safety, as well as DOE's plan for improving federal
9 oversight.
10 I would like to introduce the other Board
11 members. To my left is Mr. Sean Sullivan. To my
12 right is Mr. Daniel Santos. To my far left is the
13 Board's general counsel, John Batherson. And to my
14 far right is the Board's technical manager for
15 nuclear materials processing and stabilization,
16 Mr. John Pasko.
17 Thank you. The three of us constitute the
18 Board. For those who were not in attendance during
19 our earlier session today, the Board heard from
20 Acting Assistant Secretary Whitney, from a panel of
21 management from DOE and its operating contractor,
22 Nuclear Waste -- NWP, and from a panel of management
23 from DOE and its WIPP operating contractor regarding
24 actions necessary to safely recover the underground,
25 and we heard from the Board staff which provided

1 testimony on the Board's oversight activities at
2 WIPP before and after the salt haul truck fire and
3 radiological release events that occurred in
4 February of 2014.
5 The testimony also summarized some of the
6 key safety concerns revealed by the February 2014
7 event to be discussed during this hearing. A copy
8 of the staff's testimony is available on the table
9 at the entrance to this room.
10 We welcome our third panel witnesses at
11 this time. Three of the four witnesses for this
12 panel have already testified today, and I would like
13 to recall each of you back to the witness table.
14 Mr. James Hutton, DOE Deputy Assistant Secretary for
15 Safety, Security, and Quality Programs and
16 Environmental Management. Mr. Joe Franco is a
17 current DOE Carlsbad Field Office manager. And
18 Mr. Robert McQuinn is the Nuclear Waste Partnership
19 president and project manager.
20 This evening you'll be joined on this
21 panel by a fourth witness, Mr. Theodore Wyka, the
22 WIPP Accident Investigation Board chair.
23 Thank you all for coming back. And
24 welcome, Mr. Wyka.
25 The Board will either direct questions to

1 the panel or to an individual panelist who will
2 answer them to the best of their ability. After
3 that initial answer, other panelists may seek
4 recognition by the chair to supplement the answer as
5 necessary. If panelists would like to have a
6 question for the record, the answer to that question
7 will be entered into the record of this hearing at a
8 later time.
9 Mr. Wyka, do you have a statement that you
10 would like to deliver to the Board?
11 MR. WYKA: Yes, ma'am. Good evening,
12 Madam Vice Chairman and distinguished members of the
13 Board. My name is Ted Wyka. My testimony is
14 documented in the three large Accident Investigation
15 Board reports so I'll keep my remarks very short.
16 I was appointed as the Accident
17 Investigation Board chairman to investigate the fire
18 that occurred in the underground on February 5,
19 2014, and then the radiological release event that
20 occurred nine days later, on February 14.
21 The AIB was on the ground for almost 13
22 months during both events. The Accident
23 Investigation Board was tasked to perform an
24 accident investigation and to prepare an
25 investigation report in accordance with the

1 Department of Energy order 225.1, titled Accident
2 Investigations. The scope on the investigation was
3 to identify relevant facts, analyze the facts, to
4 determine the direct, contributing, and root causes
5 of the event, to develop conclusions, and to
6 identify judgment of needs for actions that, when
7 implemented, should prevent the recurrence of the
8 accident.
9 Facts relevant to the event were gathered
10 through interviews, through reviews of documents,
11 and other evidence, including photographs, videos,
12 and other forensic evidence.
13 A hotline was also established to allow
14 personnel to communicate concerns or other related
15 information to the Accident Investigation Board.
16 Facts were analyzed to identify the causal factors,
17 using event and causal factors analysis, using
18 barrier change analysis, root cause analysis, as
19 well as integrated safety management and human
20 performance analysis. So various analyses were the
21 methods used.
22 The accident investigation reports, all
23 three of them, covering these events have been
24 issued, have been made available to the public, and
25 discussed at public meetings, at the four public

1 meetings. The radiological release event was broken
2 into two phases because access to the underground
3 was restricted for several weeks following the
4 radiological release event. But the conclusions and
5 findings found in the initial part of the
6 radiological investigation were critically important
7 to the WIPP recovery efforts.
8 For the underground salt truck fire on
9 February 5, 2014, the Board identified the root
10 cause of this accident as the failure to adequately
11 recognize and mitigate the hazards regarding the
12 fire in the underground. This included recognition
13 and removal of buildup of combustibles through
14 inspections and periodic preventive maintenance, and
15 the decision to deactivate the automatic onboard
16 fire suppression system.
17 The Board identified contributing causes
18 in the areas of preventive and corrective
19 maintenance, fire protection program, training and
20 qualification of the operators and supervisors, the
21 central monitoring room operations in response to
22 the fire, emergency management and preparedness and
23 response, nuclear versus mine culture, oversight at
24 all levels of follow-up on repeat deficiencies and
25 conduct of operations.

1 Now, for the phase 1 of the radiological
2 release event on February 14, the Board identified
3 the root cause as a cumulative effect of the
4 inadequacies in the ventilation system design and
5 operability compounded by degradation of key safety
6 management programs and safety culture that resulted
7 in a release of radioactive material from the
8 underground into the environment and a delayed
9 ineffective recognition and response to the release.
10 The Board identified contributing causes
11 in the areas of conduct of operations, radiation
12 protection program, maintenance nuclear safety,
13 emergency management safety culture, execution of
14 contractor insurance system, and again, oversight at
15 all levels.
16 I will submit my detailed testimony for
17 the record and I will now be happy to answer any of
18 your questions.
19 VICE CHAIRMAN ROBERSON: Okay. Thank you,
20 sir. And we have entered the statement from the
21 other three of you into the record, if that's okay.
22 MR. HUTTON: Yes.
23 VICE CHAIRMAN ROBERSON: Yes, thank you.
24 Thank you.
25 First of all, I'd like to thank each of

1 you for your continued testimony again this evening.
2 And with that, we are going to continue with
3 questions, and I believe we will start with you,
4 Mr. Santos.
5 MR. SANTOS: Thank you, Madam Vice
6 Chairman.
7 I would like to start with a question for
8 you, Mr. Wyka. The Accident Investigation Board
9 report described that the actions taken by the
10 underground workers in response to the truck fire,
11 including the truck operator not immediately
12 releasing the onboard fire suppression systems and
13 operators attempting to move a 300-pound fire
14 extinguisher to the fire location, led to your
15 conclusion that, quote, "the response of the fire
16 and the worker actions in response to the fire in
17 the underground are not clearly defined and training
18 was inadequate."
19 Can you for the public and the record
20 please elaborate on some of the evidence in a
21 summary fashion that led you to that finding?
22 MR. WYKA: Yes, sir. You know, right off,
23 as I think has been mentioned before, the workers on
24 underground were actually heroes that day. I did
25 make that clear at the public meeting as well. They

1 did what they needed to do to get out, as well as
2 help their teammates get out. So there were a lot
3 of the systems and programs and processes sort of
4 that let them down that day, and that obviously
5 we're working on now and the site has made a lot of
6 improvements, especially in the area of training. A
7 lot of the -- there were inadequacies and we've had
8 several examples, one in just the use of the
9 self-rescuers and the SCSRs. They're very
10 complicated to use. But that's the first time
11 you're going to use it, is when there's smoke all
12 around you and there's a lot of tension and anxiety.
13 So it's something that you really need to practice
14 on a regular basis to be able to do that with your
15 eyes shut, do that in high-stress situations, pull
16 out the SCSRs and self-rescuers and put them on.
17 And many in the underground that day did not have
18 that level of knowledge to be able to do that, that
19 experience to be able to do that. They received a
20 lot of help from their teammates on, you know, to
21 how to put on the equipment and how to take it off.
22 A lot of it had to do with training.
23 First of all, the drills were not set up for the
24 individuals in the underground to practice that.
25 You know, their training was inadequate. There was

1 really no time, even on the annual refresher, to
2 actually pull it out and put it on. It was watching
3 a video.
4 I don't know whether you had an
5 opportunity to operate one of the SCSRs, but it's a
6 complex piece. It's about ten steps in order to
7 effectively take it out and use it. And the
8 self-rescuer is equally difficult, as well, again,
9 especially in stressful conditions. Evacuation
10 drills. You know, there wasn't really an effective
11 program of testing that process, testing
12 evacuations.
13 Use of portable fire extinguishers. Many
14 of the individuals didn't really know how to use it,
15 nor was there really any operational experience on
16 using the fire extinguishers. Wrong time to learn
17 how to use it is when you need to know how to use
18 it.
19 You know, looking at training and
20 qualification and the CMR, the central monitoring
21 room, just operating the alarms, operating the --
22 conducting -- doing the right announcements, when to
23 turn on the strobe lights. There were significant
24 time delays in all of those activities, and you
25 know, they were also ineffective, as well as just

1 shifting ventilation within the --
2 (A discussion was held off the record.)
3 Yes, ma'am. Sorry about that. The other
4 area is responding to fires. And the policy wasn't
5 all that clear on when to fight the fire and when to
6 flee. And then that brings into the question of the
7 training, whatever decision you make, and having
8 your equipment right there at hand to implement the
9 policy. But there was confusion about whether to --
10 to fight a fire or flee, and it's all sort of based
11 on the level of -- if it's incipient or if it's a
12 form that, you know, an individual can easily put it
13 out. But that's hard to make that call, you know,
14 in a short period of time.
15 And then also operating the manual fire
16 suppression systems. Several of the operators, you
17 know, had problems doing that. So a lot of this
18 just fed into the training and qualification area,
19 so put them in a position to succeed when they
20 really needed to.
21 MR. SANTOS: I have a follow-up. You
22 mentioned you'd been on the ground with your team
23 about 13 months and in that period not only were you
24 performing your investigation, but I imagine you
25 were already communicating with both the field

1 office and the contractor. Where are we today from
2 your perspective? If you were to do the
3 investigation starting today, how much progress and
4 how much more do they have to do?
5 MR. WYKA: You know, I think a lot of the
6 areas that we found issues with, you know, are still
7 being worked, you know, especially in the programs,
8 processes, systems, procedures. But there's also a
9 tremendous amount of improvement, you know, over the
10 last 13 months. And as you state, you know, I made
11 underground entry, you know, in the last 13 months
12 to the waste face with the teams and stuff, and you
13 know, so in all phases of the operations, let me
14 just point out a couple. Radiological protection,
15 where, you know, I think they had significant
16 issues, you know, 14 months ago. In fact, to the
17 point where we needed, you know, assistance from
18 Los Alamos and Savannah River and from some of the
19 other sites, and some of the basic activities
20 associated with radiological protection.
21 Over the last 13 months they have grown
22 where, you know, I think their level of confidence
23 is equal to, you know, their mentor, so to speak,
24 you know, from the work that they have done and from
25 the people that they have brought in and the

1 management team providing them resources, the
2 effective training now.
3 So yeah, I can see definitely see, you
4 know, a definite increase in the level of expertise,
5 in the level of knowledge, in radiological
6 protection, conduct of operations, and you know,
7 several areas especially with the work force.
8 MR. SANTOS: Thank you.
9 VICE CHAIRMAN ROBERSON: Mr. Sullivan?
10 MR. SULLIVAN: Let me ask the same
11 question, then, of Mr. McQuinn. Where are we today?
12 Were the workers able to put out a fire today?
13 MR. McQUINN: We have more to do. We
14 have -- Joe and I are going to approve a baseline
15 needs assessment that was in significant need of
16 updating. And to be honest with you, when I got
17 here a year ago, I disagreed with some of the
18 conclusions from previous BNAs. And we're taking
19 very seriously, you know, simple questions like:
20 How much do we fight a fire before we evacuate
21 everybody underground? And that's a hard question,
22 and we're not quite done with settling that.
23 But to give you some examples, in terms of
24 emergency management, there were three emergency
25 management staff a year ago, professional staff.

1 Now there are 12. In terms of firefighters, there
2 were 12 and now today there are 28, and those 28 are
3 going to have a level of qualification similar to
4 what a municipal firefighter would have. Now, that
5 doesn't mean that we'll have him fight every fire
6 underground. It means that we'll have him do what's
7 safe to make sure that everyone can evacuate. So
8 it's not about protecting property. It's about life
9 safety underground.
10 So we're investing a lot of resources in
11 both emergency management and firefighting.
12 Culturally, I think we're turning the
13 corner and I think we'll sustain what needs to be
14 done in terms of people believing in the importance
15 of drills, people accepting the importance of being
16 told during the drill stress that they have got to
17 put on a self-rescuer.
18 Another simple example -- and you know,
19 Mr. Santos, you experienced this -- a year ago, a
20 high-level visitor, a VIP person, would come with
21 not very much training and be escorted underground.
22 So now, no one comes. It doesn't matter who you
23 are. You're going to get trained and you're going
24 to prove that you can put on a self-rescuer before
25 we take you underground. So some simple things like

1 that.
2 And then there's no question we meet fire
3 protection requirements for Mine Safety and Health,
4 but we need to go beyond that, and so we're trying
5 to -- you know, we're becoming zealots when it comes
6 to fire prevention underground.
7 And we've got more to do. I'll give you a
8 simple example. I declared no smoking. There was a
9 point early on when I simply said we will not smoke
10 underground. Now, that wasn't an all-around
11 balanced decision, but until I was comfortable that
12 we knew how to control smoking, we were not going to
13 start a fire by something as simple as smoking. And
14 that didn't meet with everybody's agreement, but
15 ultimately, we worked our way through that and we
16 brought even that simple thing under control. So
17 there's some cultural things that go along with
18 that.
19 And then we've been fortunate this year,
20 we got everything we asked for in terms of funding.
21 Joe and headquarters provided that. And now from a
22 firefighting/emergency management standpoint, we're
23 replacing with very modern -- very modern equipment
24 with auto suppression systems that are modern age.
25 And so I think all those pieces are coming

1 together. We're not there yet. But I think we're
2 on the right path and I'm particularly encouraged
3 with the work force.
4 MR. SULLIVAN: Okay. How about with
5 procedural requirements, the individual who's in
6 charge in the central monitoring room, the procedure
7 that that person has in order to direct the proper
8 actions? Have those been fairly scrubbed, revised,
9 as necessary? Do the people there -- are you sure
10 the people there know the right things to do?
11 MR. McQUINN: So the central monitoring
12 room operator is a very, very important position,
13 and the shift manager that supervises him. And the
14 immediate changes -- I'll give you a simple example.
15 The question of should you switch ventilation while
16 people are evacuating underground. We made that
17 very simple. We simply made a very strong procedure
18 change that prohibited any switching of ventilation
19 until the evacuation is completed. Now, maybe we'll
20 revisit that if we become more technically
21 sophisticated with underground ventilation modeling.
22 But you know, that was an example of where the
23 Accident Investigation Board said that that
24 contributed, you know, significantly to confusion,
25 so we eliminate that confusion. So that CMR

1 operator and shift manager understand from me that
2 they do not have the authority to switch ventilation
3 until the evacuation is completed.
4 So simple procedure changes like that
5 where we had given them -- we had made the
6 procedures complex, wanting to give them authority
7 to make decisions as an emergency would evolve, but
8 in that case we made it simple. So I think the
9 procedures are adequate for today and they'll get
10 better over time.
11 MR. SULLIVAN: Okay. I want to switch a
12 little bit and ask you about configuration
13 management, which was also in the accident
14 investigation report on the fire.
15 Specifically there was a lot of things
16 about doors. These are doors in the underground
17 that were operated manually, and so some of them
18 were chained open. Others were operated and left
19 open. I think there was a particular door that was
20 important to the filtered ventilation flow path
21 which was open after the fire, and did get shut
22 prior to the rad release on a subsequent entry, but
23 had there not been that entry, had it not been shut,
24 it might have -- I believe it would have
25 significantly complicated the amount of the

1 underground that got contaminated.
2 So configuration control is different than
3 a maintenance issue in that things aren't
4 necessarily broken. A door that's made to be open
5 that is open isn't broken. How are these things now
6 being controlled and what procedures have been put
7 in place to make sure that everything that may
8 affect, for example, the ventilation system is
9 actually known and controlled in terms of what
10 position it's in?
11 MR. McQUINN: And this one I may ask Joe
12 to help me, you know, when I finish.
13 There are four control doors that are
14 fully functional and by requirement in the central
15 monitoring room are required to remain functional
16 and in remote control. Okay? Now, that doesn't
17 mean that we don't have problems where the floor
18 will lift up and heave and cause a door to become
19 inoperable.
20 But there are four control doors and
21 they're all operable and they're all operable
22 remotely. And there are five primary dampers,
23 regulators, that we remotely control ventilation
24 with, and they're all operable, functional, right
25 now. And then that, like fire impairments, you

1 know, is a matter of system status, you know, that
2 we talk about each day at the plan of the day
3 meeting.
4 Now, there are bulkhead doors underground
5 where there has been floor heave where doors are not
6 currently functional. So there are problems with
7 doors. But the main ventilation control doors are
8 fully functional in remote control.
9 Now, out of fairness to the folks that
10 preceded me, there were some upgrades going on that
11 affected the doors that were held open manually.
12 I'm not excusing that, but there were some reasons
13 that those doors were not operable. But right now
14 we make that a priority.
15 MR. SULLIVAN: Okay. Mr. Franco, are you
16 satisfied with the way all these doors are being
17 controlled so the ventilation system will be known
18 to work properly?
19 MR. FRANCO: Mr. Sullivan, right now with
20 the configuration of the underground, I am satisfied
21 with where we are with that configuration. There is
22 a sense of still, for us, that importance for the
23 configuration to be still a high item for the
24 cognizant engineer, for them to understand,
25 especially right now with the limited amount of

1 ventilation that we have -- before, when we had the
2 425,000 cubic feet per minute going through the
3 mine, you could run and open a man door, or a couple
4 of them, and it wouldn't impact any kind of
5 ventilation flow for the rest of the mine.
6 We have over seven miles of drift in the
7 underground. And when you look at that, at 60,000
8 CFM, it's a premium. That ventilation is a premium.
9 So when the procedure for the four -- pretty easy to
10 just go do these, Bob's team has implemented a
11 process there where the folks, as part of the prejob
12 briefing, knowing where the work activities are
13 going on, because the underground services in
14 coordination with the facility shift managers, the
15 underground services provide information to the
16 facility shift managers, they have to understand
17 exactly what the lineup is in the underground.
18 So if you do have an event, they know.
19 And the CMR operator has to be able to explain to
20 the folks that are evacuating from the underground
21 which pathway they can take to be safe. And that is
22 part of the -- every day, as the activities are
23 going on -- we just fixed the control doors. There
24 was one that was out of service because of the floor
25 heave, as Bob was mentioning, as that was being

1 repaired, the operators needed to know that.
2 We monitored an oversight, making sure
3 that the turnover that was conducted by the shift
4 managers -- that that was something that was carried
5 over into -- you know, from manager to manager. So
6 that process continues to be. It's something that
7 is of high importance for us to monitor, especially
8 with sensitivity at 60,000 CFM.
9 MR. SULLIVAN: Okay. Thank you.
10 VICE CHAIRMAN ROBERSON: Mr. Santos?
11 MR. SANTOS: I want to shift a little bit
12 to the communications. This question is to
13 Mr. McQuinn.
14 Can you describe some of the more
15 significant changes that have been implemented
16 regarding the communication systems used to notify
17 underground workers of emergencies and the need to
18 evacuate and the interface with the central
19 monitoring room?
20 MR. McQUINN: By the end of March -- and
21 I'm going to get quickly to emergency management and
22 detection and notification, communication. By the
23 end of March, I had done an initial triage of all
24 the safety management programs, and with Joe's help
25 produced a document of compensatory measures.

1 And then by the end of April, it was clear
2 that we needed even more definition for emergency
3 management and fire protection, and so we produced a
4 stand-alone compensatory measure document for
5 emergency management and fire protection, and we're
6 on revision 4 to that now.
7 And in that document we followed the trail
8 of: How do we detect -- underground how do we
9 detect a fire, how do we notify with communications,
10 and then how do we respond and evacuate and the
11 count, and then how do we exercise all of that with
12 drills.
13 There were a number of significant
14 notification or communication issues with inoperable
15 public address indications and with indications on
16 the walls of the underground in terms of the visual
17 signal, you know, in terms of whether you're on the
18 right way out or not. There were way too many cases
19 where those indications were covered or missing.
20 So we proved that our regular surveillance
21 procedure that looked at all the aspects of
22 communications was adequate. We ran it. Then we
23 fixed the communication, the communication not only
24 underground but with the central monitoring room,
25 and then we run that frequently, weekly, to prove

1 that the communications are adequate. So we
2 increased the frequency and then we pay attention to
3 the communication piece.
4 We're going to improve it. We're going to
5 try to move into some of the modern -- more modern
6 age than the system that we have right now, so we
7 have projects planned that we're doing conceptual
8 design for that would even -- that will strengthen
9 communication and all aspects of emergency response.
10 You know, a simple example. When you
11 entered, you brassed in and you got a unique button
12 that indicated who you were and when you entered.
13 And that was important from an accountability
14 standpoint. But the technology is available, and
15 Joe and I are determined to implement it, so that
16 we'll have a locator on every individual and we'll
17 not only know that you're underground; we'll know
18 exactly where you are underground. So we have a lot
19 of plans for some technology improvements that will
20 make a difference particularly in terms of emergency
21 management.
22 MR. SANTOS: So to follow up on
23 communication, you already have -- appear to have
24 implemented training changes, procedural changes, as
25 of today, to improve those communications; is that

1 correct?
2 MR. McQUINN: Yes.
3 MR. SANTOS: During my visit, my
4 understanding was there were also some preliminary
5 discussions about some upgrades to the central
6 monitoring room; is that correct?
7 MR. McQUINN: That is. So I did a human
8 factors analysis of the room. And the room is
9 adequate, but you know, it's 20 -- it's a generation
10 old in terms of its technology.
11 So we looked at the human factoring, you
12 know, particularly around the emergency response,
13 and a simple example is the confusion that resulted
14 at the time of the fire for the way the CMR operator
15 activated the communication, the strobe lights and
16 the notification. So there's some human factors
17 things that we'll do and we have. It won't happen
18 this year, but we have a project in conceptual
19 design to completely renovate the central monitoring
20 room.
21 MR. SANTOS: Are the operators
22 participating in that design process?
23 MR. McQUINN: All the qualified operators
24 participated in the human factors analysis and
25 they'll be right in the middle of helping us

1 redesign.
2 MR. SANTOS: Thank you.
3 VICE CHAIRMAN ROBERSON: Are you done, Mr.
4 Santos?
5 MR. SANTOS: Yes, ma'am.
6 VICE CHAIRMAN ROBERSON: Okay. Thank you.
7 Mr. Hutton, the DOE accident investigation
8 identified significant weaknesses in the WIPP fire
9 protection program. We talked a little bit about
10 that earlier. But notably, the contractor -- one of
11 the weaknesses was the contractor did not ensure the
12 baseline needs assessment, addressed requirements of
13 DOE order 420.1C, and the Mine Safety and Health
14 Administration with the results completely
15 incorporated into the implementing procedures.
16 How will the baseline needs assessment
17 approach reconcile DOE and mine safety requirements?
18 And I recognize in our earlier session you were
19 emphatic that you see no conflict. But bear with
20 me, because some of our technical folks, yours
21 included, think there is a conflict. Why do they
22 think there is some conflict between the two sets of
23 requirements?
24 MR. HUTTON: Well, I can't tell you why
25 they think what they think. But frankly, you know,

1 the requirements are all directed at the same thing.
2 You know, it's the same thing we all learned in
3 kindergarten when we were five years old. We
4 learned: If there's a fire in the house, get out of
5 the house.
6 All right? And the only question that
7 arises when you're in the underground is, it's
8 pretty far to the door. And so one of the things
9 that has to be dealt with, like Bob was mentioning
10 earlier, is, you have to think about what is the
11 right strategy to ensure that the 75 people can get
12 out of the house safely? Because they have a long
13 way to go.
14 So that strategy needs to be put together.
15 And it's not impossible, but it does need to be
16 well-articulated, have the right equipment, right
17 training, and effectively implemented.
18 So the baseline needs assessment is being
19 revised, it's pretty close to being submitted to us
20 for review, as I mentioned earlier. The draft that
21 I have seen is significantly improved over the
22 earlier document. I think it's well-based in the
23 standards, things like the NFPA requirements, Mine
24 Safety and Health Administration requirements. What
25 I have heard about the strategy for underground

1 firefighting I think is promising. I need to -- I
2 want to see the final document before, you know,
3 passing judgment on that, of course.
4 We intend to perform -- you know, as part
5 of our corrective action plan, we've developed
6 criteria review and approach documents for the
7 emergency preparedness function. We'll perform an
8 integrated assessment at the site, and 90 days
9 after -- target of about 90 days after the
10 contractor implements their emergency plan, planning
11 hazards analysis, the new EALs, emergency action
12 levels, and the new baseline needs assessment, we'll
13 go do an evaluation of that. So you know, that's
14 what we're going to have to do, I think, to make
15 sure we have, you know, solid processes in place, I
16 think, to deal with the eventuality of a fire.
17 And my honest opinion is that the main
18 thing we need to do is, first of all, prevent a
19 fire. If we never have a fire, we never have to
20 react to one. So that's what I'd actually like to
21 see happen the most.
22 I'm encouraged to a degree, you know, like
23 I toured the underground in February, and toured the
24 underground yesterday. I could see a fair degree of
25 improvement between those two in terms of the amount

1 of materials being removed. I think, as Bob said,
2 there's a lot of work to be done yet, because I
3 don't think it meets, as yet, the standards that
4 we'd like to have going forward. But I do think
5 we're headed in the right direction and I think that
6 the plan that the contractors developed for fire
7 protection improvement and for emergency response
8 improvement is, in fact, heading in the right
9 direction. If it's properly implemented, I think
10 we'll probably be happy with the results.
11 You know, they made a number of changes in
12 terms of how the facility shift manager responds to
13 an event, made the provision which is, you know,
14 pretty standard in most emergency response
15 organizations where that person -- once the
16 emergency response organization has been staffed,
17 they turn over the responsibility for managing the
18 emergency to the staff at the ERO, at the EOC.
19 That's, you know, very standard process. That
20 wasn't the process that was in place over a year
21 ago. Now it is. I don't think it's -- they still
22 have work to do to get good at that, frankly, but I
23 think that, you know, it's headed in the right
24 direction at this point.
25 VICE CHAIRMAN ROBERSON: Thank you for

1 that, and let me just add a clarification. I don't
2 think there is any conflict between the goals of the
3 different safety requirements, it's the debate about
4 which tools, and I guess what I heard you say is,
5 you're confident that there's a suite of tools that
6 can be put in place that satisfy all safety
7 requirements.
8 MR. HUTTON: Yes.
9 VICE CHAIRMAN ROBERSON: That's what I
10 heard; right?
11 MR. HUTTON: Yes.
12 VICE CHAIRMAN ROBERSON: Okay. I just
13 wanted to make sure. Thank you.
14 Are there any lessons learned -- and this
15 is to you, too, as well, Mr. Hutton, since you're
16 representing headquarters. Are there any lessons
17 learned that should be shared with other underground
18 defense nuclear facilities? I mean, there aren't a
19 lot of them, but there are some. Are you guys doing
20 anything to share your lessons learned?
21 MR. HUTTON: Yes. Certainly we have -- as
22 you know, the reports, you know, are published on
23 the department's website. So they're available to
24 frankly everybody in the department, including the
25 public. So that information is out there.

1 And certainly we have shared that
2 appropriately with the other program offices. And
3 you know, I expect that they'll take that to heart.
4 I mean, that's what we do in operating, you know,
5 complex nuclear facilities. They'll take that -- I
6 would expect that the other program offices would
7 want to say, "Gee, there but for the grace of God go
8 I. Maybe I should look at this and satisfy myself
9 that I don't have the same vulnerabilities."
10 And so I'm sure if you ask General Klotz
11 that, I'm sure that's what he would say they're
12 doing. We've briefed the results of the Accident
13 Investigation Board specifically to the NNSA senior
14 leadership, so -- Ted did. So they're certainly
15 aware of the issue, and you know, my expectation is
16 they'll act on it just as we will.
17 VICE CHAIRMAN ROBERSON: Did you have a
18 follow-up, Mr. Santos?
19 MR. SANTOS: Yes, I want to just follow up
20 on this discussion. Mr. Hutton, you or Mr. McQuinn
21 described -- and I went through it when I had the
22 visit of the underground -- that it doesn't matter
23 who's visiting; this practice of now having to go
24 through and put up the self-rescuer and show that
25 you can actually handle the equipment. I guess a

1 good litmus test for me will be when I go visit the
2 Nevada underground site where I expect to see a
3 similar type of practice.
4 MR. HUTTON: That would be a fair thing to
5 expect to see, I think.
6 VICE CHAIRMAN ROBERSON: Thank you,
7 Mr. Santos.
8 And I have one last question at this time
9 for Mr. Franco. The Accident Investigation Board's
10 fire report identified that several recommendations
11 from the 2010 and 2012 revisions to the baseline
12 needs assessment were not completely addressed.
13 CBFO approved these revisions without comment. And
14 I guess kind of much like we talked about under
15 emergency preparedness, I think it's important to
16 understand why people make decisions they do. I
17 think we can put a lot of tools in place, but what
18 is your understanding -- how does that happen?
19 MR. FRANCO: The approval of the baseline
20 needs assessment -- I think if you go back and look
21 through the AIB report, it wasn't one day the events
22 happened, you know, the change happened to the
23 safety bases, to the baseline needs assessment. It
24 was over the years, again, of complacency of how
25 well we had been doing.

1 For myself, you know, when I look at this,
2 you know, I started out here as an entry-level
3 technician in 1989, and was here for the opening of
4 WIPP and actually left the contractor side in 2006.
5 So I got to see the full spectrum of how things were
6 generated.
7 And then us opening and filling the
8 pipeline was the terminology you were hearing
9 throughout the process. As the facility matured and
10 then on the safety aspect of these things, I believe
11 that it was a course over time and not, you know,
12 something immediately.
13 And you know, great lessons learned for us
14 now, I can also add to Mr. Hutton's here from the
15 lessons learned. Mr. Whitney sent us an e-mail with
16 direction for all shift -- all facility managers
17 that our next conference that we have together that
18 we will be going over the lessons learned from
19 these. So he has made it mandatory for all of us to
20 be ready to discuss this at the next field managers'
21 things, which is next month or so.
22 So we -- you know, and I think that can
23 happen with anybody that's doing really well. We
24 definitely took -- and when Mr. Wyka showed up, even
25 for the fire, my thing was: I need to know what is

1 broke, and I am open to whatever you need to
2 discuss, if you need a separate room for folks or
3 whatever, so that I can understand exactly what
4 failed here.
5 And so we were pretty open and provided
6 everything to Mr. Wyka, so that we could get this
7 type of detailed report so that we could now
8 progress in fixing the things.
9 I did -- again, it's over a course of
10 times. I came in and actually took a tour of the
11 WIPP facility before I returned. I returned on
12 February 13th of 2012. And I took a tour in October
13 of 2011 and had seen some -- how it started -- it
14 wasn't the same as when I was there when we first --
15 the grand opening, and it included the personnel,
16 right, and just didn't have the same atmosphere that
17 we had when -- and so I wanted to come back and make
18 a difference for that.
19 VICE CHAIRMAN ROBERSON: Thank you,
20 Mr. Franco.
21 Mr. Sullivan.
22 MR. SULLIVAN: Thank you, Mr. Franco.
23 I'll stick with you. The fire hazard analysis had
24 errors in it when the Board and Board staff looked
25 at it back in 2011. And then after the accident,

1 Mr. Wyka and his team noted that there were still
2 deficiencies in the fire hazard analysis. Supposed
3 to analyze for all credible fire scenarios. Has
4 that been fixed? Do you now have a fire hazard
5 analysis that you feel confident analyzes all
6 credible fire scenarios?
7 MR. FRANCO: So on the fire hazards
8 analysis, right now I'm comfortable with where we
9 are today. Does it capture all -- we are going
10 through that process right now, as we're going
11 through the safety basis and those and making sure
12 if there's anything that comes up that we haven't
13 addressed, we'll definitely go back into it.
14 What I am really comfortable with is the
15 process that we've been using on how we're going
16 back and folks are being open to going back and
17 looking and re-evaluating this fire hazard analysis
18 and did we capture everything, including, you know,
19 as you toured the underground, you know, what's the
20 fire loading that we have in the underground? What
21 are we -- where is it located? How are we managing
22 that? How are we managing the fire suppression for
23 the equipment in the underground?
24 All of those things that are particular
25 for the safe operation of the underground, we're

1 moving through on the fire hazards analysis. So
2 right now, I am comfortable with it. Not to say
3 that, you know, as our teams every day are
4 discussing these items, if anything comes up, we
5 will put it right back into the fire hazard
6 analysis, a process which Bob McQuinn will run
7 through his, and we will be providing that oversight
8 with our fire protection engineers and also reaching
9 back to the headquarters side of the house for the
10 expertise in this very specific item. So very close
11 watch from us right now on this particular one.
12 Yes.
13 MR. HUTTON: If I could just add to that,
14 you know, as Joe alluded to, we are intimately tied
15 in with CBFO in the review of both the document
16 safety analysis that's being prepared, as well as
17 the safety management programs, including the fire
18 hazards analysis, the BNA, and so on. And we'll
19 continue to do that until those things are approved.
20 And then we'll provide oversight of their
21 implementation.
22 MR. SULLIVAN: Thank you.
23 Mr. McQuinn, some more specific corrective
24 actions from the fire incident. Will all vehicles
25 in the underground going forward be using

1 fire-resistant hydraulic fluid?
2 MR. McQUINN: Yes. Now, there's some
3 cases where the manufacturer -- there's a limit to
4 the manufacturer's ability with respect to the
5 fluids, but the straight answer is yes. They're all
6 at least fire-resistant, and we're pushing hard to
7 get the vendors to find a vendor who can give us the
8 highest level of resistance, but they'll all be
9 fire-resistant.
10 MR. SULLIVAN: Okay. How about fire
11 suppression systems on those vehicles? I think the
12 salt truck that had the fire -- appears that the
13 automatic fire suppression system did not function
14 on that truck, if I'm correct. What's being done
15 going forward to make sure that every vehicle has a
16 fire suppression system that will work?
17 MR. McQUINN: I want to piggyback on what,
18 you know, Jim Hutton said. Our first goal is to
19 find equipment that isn't liquid-fuel-powered, and
20 we're having some success, you know, with electric
21 forklifts, electric bolters. There will be some
22 equipment that we're not -- we simply are going to
23 have to power with liquid fuels, but all liquid
24 fueled equipment will have automatic suppression
25 installed.

1 MR. SULLIVAN: Okay. Does that mean an
2 electric -- every vehicle can't have a fire, or
3 doesn't need an automatic fire suppression system?
4 MR. McQUINN: That's a good question,
5 Mr. Sullivan. I hadn't thought about the electric
6 forklift.
7 MR. FRANCO: I can answer that because I
8 have. When we developed this PISA for the operation
9 of, you know, the hydraulics, we also looked at it
10 on the surface, because we have hydraulic equipment
11 on the surface, and that.
12 But we also looked at the electrical side
13 of the house, and for us and the DOE, one of the
14 things that we continue to apply -- we were talking
15 about the expertise -- is that we would provide --
16 as these things come into play and we start to put
17 them in our processes is that they would have a fire
18 suppression system on them. That is a requirement,
19 and that is something that we're going to make sure
20 that happens for the operation in the underground.
21 MR. SULLIVAN: Okay. Now, generally
22 there's a DOE order covering nuclear facilities that
23 says there should be a fire suppression system
24 throughout the facility. So you know, if we're
25 building a building, we would be putting a fire

1 suppression system in it that runs throughout the
2 building.
3 Perhaps in this mine it doesn't quite make
4 sense, yet if it doesn't make sense, I think there's
5 a technical procedure to follow in order to have
6 some resolution as to what exactly is necessary if
7 we're not going to meet the requirement. Have we
8 looked at that and what we should be doing with
9 respect to the mine? I'll ask Mr. McQuinn.
10 MR. McQUINN: So I won't speak to the
11 directives. But what we've done -- here's what
12 we've done. If you think about the -- I'm going to
13 go back real quickly to the fire hazard analysis.
14 My current FHA has been driven by nuclear safety and
15 protecting the nuclear source term. But it wasn't
16 adequately driven by life safety the same way as we
17 applied it to the nuclear source term. So now we're
18 going to apply it to the concept of life safety,
19 even though there may not be a nuclear source term.
20 If my underground services organization
21 has a home base and there's a life safety issue with
22 egress and transient combustibles, then I want my
23 FHA to speak to that, even though there's no risk of
24 the nuclear source term. So in that case, the
25 nuclear directive doesn't necessarily completely get

1 the life safety answer, but we're applying the
2 concept of the nuclear directives.
3 I lost my train of thought, Joe.
4 MR. SULLIVAN: Well, I was asking
5 specifically if there's a DOE Order 420 requirement
6 in the nuclear facility fire suppression system.
7 MR. McQUINN: So what we did was, we took
8 the NFPA requirements that certainly do apply
9 aboveground and we made an honest effort to apply
10 them underground. And then from that, we asked
11 ourselves, you know, does it make sense to put water
12 sprinklers in in all eight miles of the drifts?
13 Probably not. But are there aspects of what came
14 out of that, the gap analysis, where it would make
15 sense, you know, regardless of whether the directive
16 specifically applied?
17 And so we took NFPA, just like we applied
18 aboveground, and we evaluated underground, and went
19 through the exercise of saying, "Okay, are we going
20 to comply? If not, what would an equivalency or an
21 exemption look like, you know, to basically inform
22 us?"
23 And then with all of that, that was one of
24 the things that caused us to put together our future
25 project plan for underground fire protection

1 improvements.
2 So that exercise of looking at NFPA
3 underground as if we had to comply with it or else
4 exempt ourselves and get approval on that helped us
5 define many of the physical improvements that we're
6 planning going forward.
7 MR. SULLIVAN: So do you expect there will
8 be areas in the underground where there will be some
9 sort of fire suppression system installed?
10 MR. McQUINN: Well, there are some areas,
11 a fuel bay. So the intent would be that there will
12 be significantly more fire suppression. Okay? And
13 we looked at it from a life safety standpoint to
14 define -- so it wasn't about property protection.
15 So it wasn't about maximum property loss. It was
16 exclusively looking at life safety.
17 MR. SULLIVAN: Okay. Mr. Franco, again,
18 are you satisfied that we're meeting the requirement
19 of the DOE order with respect to a fire suppression
20 system in a nuclear facility; I mean, to the extent
21 we can't do it throughout the entire eight miles,
22 that there's a good technical justification for
23 where it is and where it is not?
24 MR. FRANCO: I'm comfortable with it now,
25 but also comfortable with the process that we're

1 following to get it better. The approach that we're
2 taking to make it better, you know, looking back at
3 the fire hazard analysis, the fire loading in the
4 underground, looking at certain areas in the
5 underground where we may have some fire suppression
6 needed for where there's accumulation of, let's say,
7 some Conexes or things like that, that continues to
8 be an ongoing process and we're working with the
9 contractor to make sure that those are covered as we
10 move forward in the process of implementing those in
11 the underground.
12 Again, with the fire suppression, also, in
13 the water side of the house, understanding that you
14 may create a hazard that's worse because of the salt
15 in the water and creating caverns and things like
16 that when you displace. But there are other
17 mechanisms we can use for fire suppression as we
18 have, like in the fuel bay in the underground, and
19 that's what we're looking at.
20 MR. SULLIVAN: Okay, thank you.
21 Mr. McQuinn, I want to shift now over to
22 the rad release event.
23 MR. SANTOS: Can I have a follow-up on
24 that? Thank you. So I understand you're going
25 through the processes of the updates and FHA and

1 very thoroughly, NFPA, all the requirements. It
2 sounds to me in the follow-up that most of the
3 strategy today is concentrated in combustible
4 loading management. Is that an accurate statement?
5 That a primary element today until all those
6 analyses are put in place is heavily focused on
7 combustible loading management?
8 MR. McQUINN: Much emphasis on combustible
9 loading, but I would tend to start with fire
10 prevention.
11 MR. SANTOS: Sure.
12 MR. McQUINN: So I think it starts -- it's
13 all about prevention. And then when we go to
14 combustible loading, here's what we're doing right
15 now. We're thinking, what if there was a nuclear
16 source term where we had to control the propagation
17 of the fire to the nuclear source term? And so
18 we're taking that approach to fire propagation and
19 defining combustible -- transient combustibles and
20 how much is too much. We're taking that concept and
21 we're applying it to what we're going to call a
22 combustible restricted area, and it's aimed at life
23 safety. It's where the air comes in, it's the zone
24 around the air intake shaft, the salt shaft, and
25 waste away shaft. And we're drawing a big circle

1 around that, and we're defining that as our
2 combustible restricted area and applying the
3 concepts of TSR kind of approach to transient
4 combustibles and trying to take that kind of
5 approach to something that's strictly life safety.
6 So that's something -- you saw the
7 beginning of that, and so we're going to take that
8 concept. It won't be directly driven by the nuclear
9 safety basis, but that's an idea where we're going
10 to make that as much as is humanly possible a
11 completely combustible-free zone. It won't be
12 completely free, but we'll manage that area in an
13 extraordinary way.
14 MR. SANTOS: So my follow-up question has
15 to do with: Will it be prudent to take some
16 additional measures while all these analyses are
17 completed? For example, some of the experts that
18 have advised me have told me that this existence of
19 self-contained mist-type fire suppression system
20 which will not result in the issues of a cavernous
21 type water everywhere, but they're very effective at
22 putting out a small fire. I'm just thinking, is
23 there more that should be prudent that could be done
24 from a fire mitigation while we wait for all this
25 analysis to be done in addition to what already is

1 being done? Mr. Franco?
2 MR. FRANCO: You know, we continue to
3 evaluate all of those things, too, and see which
4 ones are easier to place, what are things -- one of
5 the key items that we initiated in the very
6 beginning -- again, we're still working on getting
7 all electrical systems up in the underground, so
8 there's still a lot of work activities to even get,
9 you know, where we can say the recovery piece now.
10 And so now we're in the enhancement side
11 of the process. But one of the big things that we
12 have done is, everybody that's trained to be in the
13 underground, the 40-hour miner is required to take a
14 live firefighting training with a fire extinguisher
15 that we weren't doing before. So that's a positive
16 in this aspect.
17 But we will continue to look at those
18 items that you mentioned. I can't tell you that
19 it's an ongoing activity that's pursuing, but those
20 have been some things that we have been looking at,
21 implementing those and seeing how they can be of a
22 good source for us, even like detection where we get
23 a smoke alarm or those that would be an early
24 detection to even support evacuation of the mine.
25 And so part of that also -- just to finish

1 with this part -- is that we also have a plan to
2 expand the wifi part of the underground that provide
3 the networking services that we need with the higher
4 technologies that are all-encompassing there, tying
5 back to the changes we were talking about in the
6 central monitoring room so that we have a
7 state-of-the-art facility. If this facility is an
8 asset for the nation, the only one with a true
9 sense, then why are we not at the point where we are
10 at the top technology side of the house? And that's
11 where we're driving to on that. So I appreciate
12 your comment there.
13 MR. SANTOS: Thank you.
14 MR. McQUINN: I'll take my turn back real
15 quickly, Joe, and you can help me with this. This
16 started partially with a question about directives,
17 and let me give you another example of where the
18 directives don't have a specific requirement but
19 we're going to do the right thing.
20 So right now we're buying rescue chambers
21 and there's no directive -- MSHA doesn't require
22 that, but we're buying them, we're buying the right
23 number, we're going to put them in the right places.
24 So it's not required by MSHA, it's not required by
25 the nuclear safety basis, but we're going to do it.

1 Okay? It's clearly the defense-in-depth concept,
2 you know, applied to mining.
3 And did I get the name right, Joe, rescue
4 chambers?
5 MR. FRANCO: That's correct.
6 MR. McQUINN: Okay. So a simple example
7 of where we're going to do a thing that probably we
8 could argue isn't required, but it's the right thing
9 to do.
10 MR. SANTOS: Thank you. Mr. Hutton.
11 MR. HUTTON: I just want to mention, I
12 think, you know, your lines of questioning,
13 Mr. Santos, you're on to something, in my opinion.
14 That was the focus of my tour of the facility
15 yesterday. I gave Joe a list of, you know, "Here's
16 some things I think you better look at," you know,
17 because I think that there are some improvements
18 that could be made in the underground short of eight
19 miles of sprinkler systems to wet down salt. You
20 know, I think there's a fair amount that can be
21 done, so along the lines of the kinds of things Bob
22 mentions here.
23 And some of those initiatives, you know,
24 that Bob brings up are things that Joe is taking
25 action to put in the performance evaluation

1 measurement plan for the contract this year.
2 There's specifically addressed things like, you
3 know, fire impairments, combustible material
4 control, the refuge chambers that Bob's referred to,
5 reliability in the ventilation system. You know, a
6 number of specific actions that -- a fee is at stake
7 for the contractor, depending on how well they
8 implement it. That hasn't quite been approved yet,
9 but that's in the process right now.
10 MR. SANTOS: Thank you. Thank you, Madam
11 Chair.
12 VICE CHAIRMAN ROBERSON: Mr. Sullivan?
13 MR. SULLIVAN: Thank you. So I'm still
14 sort of on the theme of trying to ask about specific
15 deficiencies that were found during these accident
16 investigation reports, but I'm shifting now from the
17 fire to the rad release.
18 So Mr. McQuinn, on the rad release, when
19 the event happened, the person in the central
20 monitoring room had difficulty reaching a
21 radiological controls individual to provide support.
22 That individual wasn't onsite, and it took him a
23 while to get hold of somebody and get him in onsite.
24 Has that problem been fixed?
25 MR. McQUINN: Yes. So like many of the

1 safety management programs, I told you a little bit
2 about the staffing investment in emergency
3 management. There were ten radiological control
4 technicians at the time of the events, and there are
5 now 30, and I'm still using some temporary
6 experienced staff while I raise up some of the
7 newest RCTs. So I now have significantly more
8 radiological control technicians on shift, and I
9 have a supervisor of the RCTs on shift as -- like a
10 watch bill requirement. That doesn't flow right out
11 of my DSA yet. But that's the way I approach the
12 minimum staffing for rad protection staff on shift.
13 MR. SULLIVAN: Okay. Thank you. Another
14 deficiency was that the CAM, the monitor, stopped
15 working after 30 minutes, and so what we now know is
16 there was a release from one of the drums, and so
17 some of the debris that came out I believe clogged
18 the CAM sensing line, so it stopped working. Would
19 a similar thing still happen if we had another one
20 of these events?
21 MR. McQUINN: I believe -- and Ted could
22 probably help me with this -- I think that what
23 happened was the CAM, as it plugged, kept
24 automatically switching filter papers until it came
25 to the end of all the available filters, and so it

1 couldn't function because all the filters had been
2 plugged.
3 MR. WYKA: Right.
4 MR. McQUINN: Now what we have is -- and
5 it was an unusual day that day, obviously. There
6 typically would have been more than that one CAM
7 operating, but -- so now we have multiple CAMs. But
8 in the case of the debris, you know, what comes out
9 of the room, plugging, the defense would be multiple
10 CAMs, but there would be some vulnerability that
11 they could all -- you know, they could all be
12 affected. I don't think they would be, and to be
13 honest with you, I hadn't thought about the
14 placement of the CAMs in that context, but I'll go
15 away and do that.
16 MR. SULLIVAN: Thank you. I think that's
17 all I have.
18 VICE CHAIRMAN ROBERSON: Thank you,
19 Mr. Sullivan.
20 I actually have a follow-up before I turn
21 it over to Mr. Santos. In the earlier session I
22 think Mr. Santos kept asking a question about -- and
23 I'm not sure I understood the answer, so I'll ask it
24 in my simple way.
25 So you have TSRs associated with -- you

1 know, in your ESSs, you have requirements associated
2 with having a CAM operating. That's factually true;
3 right? And the question was: What if the CAM
4 fails? Do you have to evacuate the underground?
5 And I don't think I ever heard the answer to that.
6 And I mean, to me, it's kind of a no/yes. No? Yes?
7 MR. FRANCO: Bob, you want to --
8 MR. McQUINN: Yeah, and I want to be
9 careful. And I'll follow up, you know, in the
10 testimony with an absolutely precise answer. I know
11 for a fact -- Joe, help me -- in order to begin the
12 day --
13 VICE CHAIRMAN ROBERSON: I got that.
14 MR. McQUINN: -- as we go underground to
15 begin the day, I know for a fact that the ESS
16 requires CAM, requires a check of station A and a
17 check of station B, and I simply do not remember if
18 the CAM -- see, there are so many CAMs that are
19 operating underground, I will find out precisely
20 what the ESS says.
21 VICE CHAIRMAN ROBERSON: I would
22 appreciate it if you would just follow up for the
23 record. That would be great.
24 Did you want to add, Mr. Franco? I'm
25 happy -- making sure we get the correct --

1 MR. FRANCO: I'll allow Bob to submit that
2 for the testimony.
3 MR. McQUINN: So I don't want to misspeak.
4 And I'm not sure.
5 VICE CHAIRMAN ROBERSON: Okay. All right.
6 Thank you.
7 Mr. Santos.
8 MR. SANTOS: I want to thank Madam Vice
9 Chairman for reasking my question. That's exactly
10 what I was trying to get at. Thank you.
11 Related to the release and my own personal
12 experience, I mentioned earlier that I was very
13 happy to go visit the various sites. So I was at
14 Lawrence Livermore, and I had the great opportunity
15 to visit the National Atmospheric Release Advisory
16 Center, state-of-the-art centralized federal asset
17 for plume modeling when an emergency happens, both
18 radiological but also chemically.
19 And after they gave us the tour, a lot of
20 their -- several of their staff members started to
21 discuss the WIPP event. And after a little bit of
22 probing, they started expressing some concerns with
23 the amount of uncertainty they were dealing with in
24 coming up with an accurate model and providing the
25 emergency decision-makers with accurate plume

1 modeling data which, as you know, is critical for
2 evacuation-type decisions.
3 So my question is for Mr. Hutton. What
4 are we doing about that, whether it's through a lack
5 of sensor data or the communication to the NARAC
6 center? How is that all being addressed? And not
7 only for WIPP, but for all the other sites?
8 MR. HUTTON: One of the things that
9 contributed to that degree of uncertainty you're
10 speaking of was a lack, frankly, of real-time
11 effluent data. We didn't have real-time effluent
12 data. We had, you know, the equivalent of a
13 portable air sampler drawing air through a filter
14 and then every so often you'd take it out and count
15 it, as opposed to, you know, a real-time monitor
16 that's giving you effluent discharge information,
17 you know, with enough frequency and enough fidelity
18 that you can more effectively model.
19 So that contributed significantly to the
20 degree of uncertainty. And I can perhaps -- you
21 know, I know one of the things that Bob was frankly
22 most insistent on when he first arrived at the site
23 was making sure that we had a real-time CAM on the
24 effluent discharge from the ventilation system. So
25 I don't know -- maybe you want to talk about some of

1 the specifics there.
2 MR. McQUINN: Yes, let me -- two thoughts.
3 So we have a very modern background subtraction
4 continuous air monitor at station B, and it has all
5 the QA on it and it is directly linked to my
6 emergency action levels. So the direct reading
7 coming out of that monitor, which didn't exist and
8 it required probing of the filter paper -- that's
9 now directly tied to the EALs.
10 Now, in terms of plume monitoring -- and
11 I'm going to forget the names of the models, so I
12 won't try to tell you -- but right now we are using
13 the standard nuclear safety accident analysis
14 models, okay, and we're using the standard emergency
15 response accident analysis protective action models.
16 And forgive me for not remembering their names, but
17 we are using the standard models. There may be some
18 questions that I'm not aware, you know, of about
19 more modern models, but we're using the same models
20 that the other DOE sites use.
21 MR. SANTOS: So I just want to follow up a
22 little bit on my question then, too. With the state
23 of affairs today, would the folks at NARAC -- are
24 they going to be getting more timely, more complete
25 information in the event of an emergency, regardless

1 of the site?
2 MR. HUTTON: Based on the monitoring
3 that's now in place, they should get better data
4 than we were able -- than the site was able to
5 supply them when this occurred.
6 MR. SANTOS: So is the contractor
7 responsible for feeding that information in a timely
8 manner to those folks in Livermore?
9 MR. HUTTON: Yes.
10 MR. SANTOS: Okay. Is that part of your
11 procedures and all that?
12 MR. McQUINN: Yes.
13 MR. SANTOS: Okay. Any other sites you
14 feel need improvement?
15 MR. HUTTON: I wouldn't represent to you
16 that nobody doesn't need improvement. I think it's
17 fairly well accepted that the sites have, you know,
18 effluent monitoring, they all coordinate with NARAC
19 in the event of an emergency, as WIPP did, to get,
20 you know, their sophisticated plume modeling. So I
21 think that is in place at our EM sites. I wouldn't
22 represent that there's not a weakness out there
23 somewhere.
24 MR. SANTOS: Thank you.
25 VICE CHAIRMAN ROBERSON: Thank you,

1 Mr. Santos.
2 Well, I want to ask a few questions about
3 the expansiveness of the corrective actions so all
4 the investigative -- all the investigations are done
5 now. And Mr. Hutton, the WIPP contractor and CBFO
6 have developed extensive corrective action plans to
7 address the findings and recommendations in the
8 accident investigation reports. Efforts to
9 implement these plans are ongoing, but significant
10 work remains. How is DOE headquarters going to
11 ensure that all corrective actions are
12 satisfactorily completed?
13 MR. HUTTON: Well, the process we went
14 through for the generation, first of all, of the
15 corrective action plans was that NWP generated
16 corrective action plans. Those plans were approved
17 by CBFO with our concurrence. CBFO corrective
18 action plan was approved by me, and then the
19 headquarters, EM headquarters' corrective action
20 plan was approved by Mr. Whitney. So that's the
21 progression that we used to generate the plans to
22 begin with.
23 Similarly, as corrective actions get
24 completed, you know, CBFO will review the NWP -- the
25 effectiveness of those actions, the completeness of

1 them, whether they have adequate objective evidence
2 that they have actually implemented the requirement,
3 whether it's been -- the corrective action, whether
4 it's been properly implemented. We will assist them
5 in doing that as part of our oversight function.
6 In addition -- and so then when CBFO
7 completes corrective actions, it will fall to us --
8 you know, they will have to satisfy themselves that
9 they have properly implemented it, and then it will
10 fall to us to validate that, you know, to the degree
11 that we feel is necessary. You know, look at the
12 objective evidence, perhaps do our own reviews. As
13 we discussed a little while ago on emergency
14 preparedness, we'll be doing, you know, a complete
15 assessment.
16 So that's the process that we will go
17 through to do that. Then, of course, you know, the
18 department has the Office of Enforcement, you know,
19 Office of Enterprise Assessment, and I think as we
20 mentioned at one of the earlier sessions here, we
21 asked them to do a couple of things for us last
22 year. We asked them to -- first of all, as we
23 developed and approved our correction actions, we
24 asked them to give us feedback on those, and they
25 have done that on the plans themselves.

1 And then further, we asked them to come in
2 and look at our operation and perform assessments,
3 you know, to give us the outside look. And so that
4 will be occurring. And as we mentioned this
5 morning, there's a schedule for that.
6 VICE CHAIRMAN ROBERSON: Okay. So thank
7 you for that. So the three key corrective action
8 plans, recognizing there's something for other
9 groups, but Mr. McQuinn has a corrective action
10 plan, Mr. Franco has one, and Mr. Whitney has one.
11 MR. HUTTON: Correct.
12 VICE CHAIRMAN ROBERSON: Are all of those
13 integrated with the recovery plan? And how are
14 they? I'm assuming the answer is yes.
15 MR. HUTTON: Yes. The answer is yes.
16 VICE CHAIRMAN ROBERSON: How does that
17 work?
18 MR. HUTTON: How does that work? Well, we
19 frankly worked together to ensure that those plans
20 married up, you know. There was -- we conducted --
21 similar to the workshop you did on safety basis
22 review a few weeks ago, we brought together folks
23 from headquarters, folks from NWP, folks from CBFO,
24 because you know, those things have -- those plans
25 have to flange up. The actions that we're going to

1 take have to fit together, and they have to align,
2 you know, with the recovery plan, as well. And in
3 some cases, you know, we may -- if we come up with
4 the corrective actions necessary that's not in the
5 recovery plan, that will cause us to add it to the
6 recovery plan.
7 VICE CHAIRMAN ROBERSON: So I understand
8 what you're saying, and actually, either you or Mr.
9 Franco can answer this one. So I'm assuming in the
10 corrective action -- well, don't let me assume
11 anything. Let me ask. Do all the corrective
12 actions have to be done before you resume operations
13 in the underground?
14 MR. HUTTON: The corrective action plans
15 have to be completed before we begin operation.
16 VICE CHAIRMAN ROBERSON: All corrective
17 actions?
18 MR. HUTTON: Well, I think some corrective
19 actions probably have long-time effectiveness
20 assessments, but you know, so there -- and I
21 wouldn't want to say that we won't decide that we
22 need to come back a year after something has been
23 completed to make darned sure that it stays
24 completed. But yes, the corrective action plans
25 need to be completed.

1 VICE CHAIRMAN ROBERSON: So the recovery
2 plan really encompasses completing all the
3 corrective actions, and if you decide later -- you
4 may decide later that there's other activities you
5 want, but there's no parsing right now.
6 MR. HUTTON: No.
7 VICE CHAIRMAN ROBERSON: Okay.
8 MR. HUTTON: Now, of course, you know, we
9 haven't completed the development of the corrective
10 action plan for the most recent.
11 VICE CHAIRMAN ROBERSON: For the phase II.
12 MR. HUTTON: Phase II report. So you
13 know, I suppose there may be things that come up
14 that need to be addressed in the recovery plan as we
15 work on that.
16 MR. FRANCO: And tied with all of that,
17 you still have the operational readiness review that
18 has to be completed and the validation that we are
19 ready to operate that -- you know, that's a process
20 that we have in place.
21 VICE CHAIRMAN ROBERSON: Okay.
22 MR. McQUINN: We're specifically meeting
23 the requirements of Accident Investigation Board
24 issues, management corrective action plan. But
25 we're approaching the restart as if it were a new

1 startup. And so I don't want to diminish the
2 importance of the corrective action plans, but that
3 won't be our basis for resuming. So I will do a
4 management self-assessment that will do 100 percent
5 review of the flowdown of the requirements and the
6 effectiveness of the requirements like a new
7 startup. So we're going beyond just what the
8 judgments of needs and those causes were. But we
9 are going to very specifically comply with
10 requirements to close the corrective actions.
11 MR. HUTTON: And there will be corrective
12 action plan items that say, "In 2017 come back and
13 make sure that you know this or that has remained
14 fixed, if you will, and is fully effective."
15 But you know, the actions -- the problems
16 have to have been addressed prior to startup.
17 VICE CHAIRMAN ROBERSON: So one more
18 question before -- I know you have a follow-up to
19 Mr. McQuinn. Earlier you communicated that you have
20 done a review of all of your safety management
21 programs. Did I misunderstand that?
22 MR. McQUINN: No.
23 VICE CHAIRMAN ROBERSON: And so have all
24 actions from those reviews been incorporated into
25 the recovery plan, as well?

1 MR. McQUINN: Yes. So -- and I know it
2 may seem awkward, so the CAPs are very specific to
3 the AIB conclusions and judgments of need. But
4 flowing out of the 17 independent assessments there
5 were many more than the AIB conclusions, weaknesses
6 that I found in the SMPs, and those are also
7 documented in my issues management corrective action
8 management program. So it takes both of those to
9 come together for a restart.
10 VICE CHAIRMAN ROBERSON: And is the
11 integration of the issues management and the
12 recovery plan obvious?
13 MR. McQUINN: I think it is. In the end,
14 the field office and headquarters worked with us so
15 that the CAPs have a -- you know, they have a heavy
16 flavor of complete SMP rebuilding and
17 reverification. Now, we didn't want to lose sight
18 of the facts, so we had to prove -- of the fact that
19 we had to prove the specifics, but the CAP goes
20 beyond, you know, and describes an overall SMP
21 approach. Okay?
22 VICE CHAIRMAN ROBERSON: Okay.
23 Mr. Santos.
24 MR. SANTOS: Thank you, Madam Vice
25 Chairman. It's more of a comment. I learned early

1 that my correct terminology is critical. And I see
2 a difference between -- following along your line of
3 questioning -- between corrective action plan and
4 actually implementing the corrective action. And
5 I'm interested in the implementation of the
6 corrective action.
7 So to me as a Board member, or maybe it's
8 for the public, I think it would be extremely
9 beneficial to have a very transparent clear
10 understanding of what are the actual corrective
11 actions that would have to be implemented? Not the
12 plan. The actual implementation of the corrective
13 action prior to resuming the operation. Because I
14 see a difference, slight differences in the
15 terminology. I just want to be very clear.
16 VICE CHAIRMAN ROBERSON: I appreciate
17 that.
18 MR. McQUINN: If I could take a shot, and
19 it follows Madam Roberson's question. So if you
20 looked at my baseline, and it's 8,000 actions, all
21 the corrective actions, some came from the AIB, some
22 came from my own self-assessments. All of them are
23 in the baseline, and I evaluate our progress against
24 all of them once a week at my plan of the week
25 meeting. Okay? So every action is defined. You

1 can even tell whether -- they're labeled -- as to
2 whether it came out of a judgment of need or whether
3 it came out of a self-assessment. But they're all
4 defined and they're all tracked.
5 MR. SANTOS: Is your baseline easily
6 filtered to those that you expect must be completed
7 prior to --
8 MR. McQUINN: It's really designed for
9 those that are all prerequisites. It's designed
10 that they're all prereqs now. As we evolved and we
11 evaluate effectiveness, you know, it could be that I
12 would make a judgment, but right now they're all
13 designed to be prestart requirements.
14 MR. SANTOS: So my question to DOE. Is
15 that information something that could be shared with
16 the Board and the public, the list of those
17 implemented corrective actions?
18 MR. HUTTON: I think it could. You know,
19 I don't know that we have placed it in the kind of
20 form that you described, to make it really
21 crystal-clear to people: Here's the corrective
22 actions that have to be completed, you know, a
23 little tick mark next to them or something, you
24 know. But I don't see why we couldn't.
25 MR. SANTOS: Thank you.

1 VICE CHAIRMAN ROBERSON: Mr. Sullivan.
2 MR. SULLIVAN: Thank you.
3 Mr. Wyka, the accident investigation
4 report for -- the phase 2 report for the rad release
5 showed that the root cause essentially was
6 incompatible materials being put into a particular
7 drum at Los Alamos. And if I remember the details
8 correctly, that drum was packed in December of '13,
9 sent here in late January of '14.
10 MR. WYKA: Yes, sir. It was packed in
11 early December, 72 days before the breach.
12 MR. SULLIVAN: Okay. And then it sat here
13 aboveground for just a couple of days after being
14 received, and then it was placed in the underground
15 and again, at the very end of January, two weeks
16 later, once it got in the underground, we had the
17 exothermic reaction and the rad release.
18 So this could have happened here, sitting
19 aboveground, while the drum was aboveground. So
20 Mr. Franco, can you just elaborate, how would events
21 have transpired if that had happened?
22 MR. FRANCO: If it would have happened
23 aboveground?
24 MR. SULLIVAN: Correct.
25 MR. FRANCO: You know, the process that we

1 have for waste handling is: The drums were received
2 in a TRUPACT-II. We take them off the trailer and
3 put them inside the contact handle bay. And inside
4 the contact handle bay is where the waste is
5 actually removed from the -- you know, from the
6 TRUPACT-II containers packaging or the -- so the
7 drums would have been, like we normally did, we
8 removed them, we put them in a facility cask, and
9 then we actually put them in the bay for storage as
10 we get ready to be transported to the underground.
11 If the events would have happened at that
12 point, then any breach or any item like that that is
13 identified by any individual that would have seen
14 there was, you know, at this point they wouldn't
15 have had MGO, they would have been able to see the
16 breach going, with the smoke that we saw that was on
17 the CAM filter. It would have been an immediate
18 evacuation of people going through the air lock,
19 they'd call the CMR, tell them that they just had
20 this event happen, they follow their process there
21 from -- it's WP-ER-4903.
22 But anyway, they go through this process
23 where they make a notification. The CMR then makes
24 a notification to the FSM and starts notifying the
25 folks to, you know, get the activation to make sure

1 that we can then, you know, see what's going on, and
2 also the monitoring of the individuals for any
3 contamination. And then the emergency operation
4 center would have been activated.
5 MR. SULLIVAN: Are you confident it would
6 all have been contained within the bay?
7 MR. FRANCO: Yes. The bay is maintained
8 under negative differential pressure to the
9 atmosphere with a HEPA set of -- a ventilation
10 system that's going through the HEPA system at all
11 times. So that would have been maintained in the CH
12 bay. And we have two sets and we run one set at a
13 time, and as they get to, you know, a clogged state
14 where we have a differential pressure, we switch
15 over to the other.
16 MR. SULLIVAN: Okay. So I think I'm
17 simply asking you the same scenario with slightly
18 different sequence of events, and have we thought
19 about that? And are we confident that for the sake
20 of the public that people are protected from that
21 scenario? And I'm hearing the answer is yes.
22 MR. McQUINN: In fact, if I could add, so
23 the current DSA revision 4 considers that a credible
24 event. And so this is a fully functionally
25 classified credited confined ventilation system that

1 Joe is describing. And for worker protection,
2 credited continuous air monitors. Unlike the event
3 underground that was judged to be not credible, this
4 one is described and properly protected, so the
5 protections are defined well in the DSA and they
6 work.
7 MR. SULLIVAN: Okay. Thank you.
8 Mr. Wyka, back to you. So how did this
9 happen in Los Alamos? Can you briefly explain what
10 errors were made? While it wasn't made here, it
11 certainly had a big impact here.
12 MR. WYKA: Yes, sir. There were numerous
13 errors in the packaging and preparation and the
14 treatment and the processes of putting that drum
15 together from the parent drum. There was a
16 breakdown at all levels. You know, there was the
17 use of -- within the glove box procedure; really
18 didn't define, you know, the technical evaluation of
19 the materials that was put into -- being placed in
20 that drum and whether they were incompatible.
21 You had organic absorbents with a
22 neutralizing agent with nitrate salts, you know,
23 with other possibly incompatible materials, and
24 there was really no technical evaluation, you know,
25 of the change in the absorbent, the change in ratio

1 of absorbent, what neutralizing agent is being used,
2 change in the neutralizing agent. So there was, you
3 know, in terms of work controls processes, as well
4 as oversight at all levels, this was not a new
5 issue.
6 You know, there was extensive research on
7 the incompatibility between organic absorbent with
8 nitrate salts. So oversight pretty much at all
9 levels, you know, sort of failed to pick that out
10 that, one, it was in a procedure; and that secondly,
11 it was actually being implemented, and that was
12 what -- at the local subcontractor level, at the
13 LANS level, at the field office at Los Alamos, as
14 well as the natural TRU program, and even in
15 headquarters, you know, there were many
16 opportunities to sort of pick out that
17 incompatibility of materials being placed in the
18 drum.
19 MR. SULLIVAN: All right. I just want to
20 be clear, because I recall reading an earlier report
21 of somebody quoting something that made it into an
22 open press report that said this happened as a
23 result of a transcription error, which made it sound
24 like someone innocently wrote down the wrong thing.
25 But reading your report, I don't get the sense that

1 this was a transcription error; is that correct?
2 MR. WYKA: The wrong information was put
3 into the glove box procedure. Some say it was just
4 a transcription error. You know, I think it was a
5 You're not flowing down the change in the procedures
6 correctly. It wasn't even picked up at the
7 oversight levels.
8 And you know, I think there were
9 discussions. Again, this was not a new issue. And
10 I think maybe the person heard, you know, organic
11 versus inorganic. So it wasn't simply just -- you
12 know, it ended up as the wrong word being used, but
13 it was the process and the missed opportunities all
14 the way through the chain that should have been able
15 to pick it up. And that's really the defense in
16 depth is, you know -- we rely on that in everything
17 we do, that if somebody makes an error like that
18 that's picked up someplace. There were many
19 opportunities to do that.
20 MR. SULLIVAN: They didn't intend to make
21 this mistake but they did intend to revise the
22 procedure and they did intend to change the
23 absorbent that they were using; they just got it
24 wrong; is that correct?
25 MR. WYKA: That's correct.

1 MR. SULLIVAN: All right.
2 MR. HUTTON: If I can add something to
3 that. I think what Ted is referring to, you know,
4 that will happen; right? We know people are going
5 to make mistakes. Individuals are going to make
6 mistakes, period. That's going to happen. But the
7 bottom line is that our systems, our processes, our
8 programs have to be robust, we have to have defense
9 in depth, such that an individual mistake cannot
10 propagate to cause an event. So the fact is, those
11 processes and programs didn't work to prevent an
12 event in this case. And Ted, you know, identified
13 in pretty good detail in the report the kinds of
14 things that were missed there.
15 MR. SULLIVAN: I understand. I appreciate
16 that. I also think it's important to know what kind
17 of a mistake it was. And there's sort of difference
18 between a transcription error, which to me sounds
19 like someone types something and they made a
20 mistake. It's almost like you had auto correct on
21 the computer and you hit the wrong key and it
22 changed to another word and nobody caught that.
23 That's not what happened here. People who
24 intended to change the procedure intended to change
25 the absorbent. They talked about what they were

1 supposed to do, and then they just ended up doing
2 the wrong thing and exactly why, who said what to
3 whom I think is unclear from your report.
4 But nevertheless, what is clear is that
5 there was a process that was used and it reached the
6 wrong decision. And then there were other
7 breakdowns after that that should have caught it.
8 That's simply what I was getting at.
9 MR. WYKA: And if I can add, you know, as
10 discussed in the report, you know, which feeds into
11 an error like that is, you know, the level of
12 knowledge, capabilities and capacities and
13 competencies, were dealing with that type of
14 reaction. And not understanding the hazards
15 associated and the reactions associated with the
16 ingredients that you're using and the potential
17 impacts --
18 (A discussion was held off the record.)
19 MR. WYKA: You know, lack of experience,
20 understanding, competencies, you know, at both the
21 worker level and the first-line supervisor level and
22 understanding the reactions they were dealing with
23 and the hazards associated and controls associated
24 with those reactions.
25 MR. SULLIVAN: So Mr. Hutton, if you could

1 then speak to: What is DOE doing now to make sure
2 that not only in Los Alamos, which I think is
3 still -- I guess Environmental Management Department
4 now has taken that over from --
5 MR. HUTTON: They're in the procession of
6 transitioning that work. Hasn't completely happened
7 yet.
8 MR. SULLIVAN: From the National Nuclear
9 Security Administration. But even in the other
10 places around in the complex where waste is
11 packaged -- mixed and packaged, what are you doing
12 to make sure that the processes by which people
13 create procedures and review them ensure that
14 technical accuracy exists within those procedures?
15 MR. HUTTON: There have been a couple of
16 steps taken. One of the things that was done was we
17 did a series of reviews at the generator sites
18 looking for exactly those kinds of issues to satisfy
19 ourselves that the processes and the programs were
20 in place.
21 We found that they basically are in place.
22 You know, we didn't find, you know, significant
23 deficiencies. If you look hard at something, you'll
24 always find something that could be improved or, you
25 know, that might have a weakness. But we did not

1 find, at least in that first round of reviews, a
2 significant issue.
3 I think we're going to have to go further
4 than that. I think that's what the Accident
5 Investigation Board report tells us. In my view,
6 it's much like a quality assurance function that one
7 performs for buying new parts to put in your
8 facility that are supposed to have a certain
9 pedigree. You satisfy yourself that not only does
10 the producer of that component have the proper
11 quality assurance procedures and processes in place,
12 but you satisfy yourself that you can actually
13 observe that work going on and periodically you come
14 visit them and maybe there are certain critical
15 characteristics that you have to verify for
16 yourself, because they're just too important to
17 allow a breakdown on the producer to get through.
18 So I think that's the kind of process that
19 we're going to have to put in place. We're working
20 with CBFO right now and the central characterization
21 process and how they go do their reviews. We've
22 participated or observed one down in Oak Ridge.
23 We'll be observing one in Idaho I believe it's June.
24 Is that right, Joe? I think it's June. And to pick
25 out, okay, exactly, you know, what is it we should

1 be doing to give ourselves more assurance, because
2 we sure can't let this happen again. Right? So
3 that's what I think needs to be done.
4 MR. SULLIVAN: Okay. So that could be
5 more thorough reviews, could be more frequent
6 reviews, or you think maybe Los Alamos was just an
7 outlier and the reviews otherwise that we have
8 throughout the complex are fine?
9 MR. HUTTON: I have been operating nuclear
10 facilities for a long time and as Mark mentioned
11 this morning, I think it's an important trait for
12 people who do that to have healthy anxiety that
13 things are going to go right. I would never leap to
14 the conclusion that any performance deficiency is an
15 outlier. That's real -- that's sort of the
16 rose-colored-glasses approach. I'm not an advocate
17 of that.
18 I think it's our job to be a little bit
19 skeptical and satisfy ourselves that, you know,
20 maybe some site is doing a great job today, but how
21 do I know they're going to still be doing a great
22 job a year from now?
23 So we have to have the systems in place
24 that allow us to detect those kinds of problems
25 before they cause, you know, an event.

1 MR. SULLIVAN: All right. Thank you.
2 VICE CHAIRMAN ROBERSON: Thank you,
3 Mr. Sullivan.
4 Mr. Santos?
5 MR. SANTOS: I'd like to change topics to
6 one that has to do with maintenance. I have several
7 questions on it, so bear with me.
8 I'll start with Mr. McQuinn. The Accident
9 Investigation Board identified that the Nuclear
10 Waste Partnership used different maintenance
11 approaches for waste handling and nonwaste handling
12 equipment. Could you comment on that and some of
13 your actions moving forward regarding that?
14 MR. McQUINN: Yes. The nuclear safety
15 basis clearly drives, based on scenarios where a
16 nuclear source term can be affected by anything, you
17 know, including the fire that might start on a piece
18 of liquid-fueled equipment. So the nuclear safety
19 basis drives the understanding of those hazards and
20 the selection of the controls well. Okay?
21 But beyond the nuclear source term, we had
22 not done an adequate job of looking at what's the
23 consequence of having a fire two miles away from the
24 nuclear source term but in just the wrong place to
25 produce both smoke or carbon monoxide that would

1 make the air unbreathable yet no effect on the
2 source term but could have every effect on life
3 safety.
4 So we've already talked about our analysis
5 of those hazards to understand how to prevent that
6 thing from happening.
7 Now, with respect to maintenance, we've
8 got a lot of improvement that we need to do, partly
9 execution, and a lot of that mostly driven not by
10 the maintenance personnel, but by the adequacy of
11 the work planning and control documents that my
12 maintenance personnel use. And so, you know, we've
13 had a legacy, unfortunately, at WIPP of being weak
14 over a period of years in the work planning and
15 control process, and that's critical to any
16 successful maintenance program. So we've got to be
17 able to execute.
18 Then we talked earlier in Session 2 about
19 preventive maintenance, and I mentioned earlier, but
20 it's worth repeating, for whatever reason -- I don't
21 have to understand it -- when I arrived, I found my
22 engineering organization buried under the operation
23 and maintenance organizations. And that simply is
24 not the way that we normally guard the safety
25 envelope, even the life safety envelope, you know,

1 at our Department of Energy sites.
2 So I elevated engineering to be a direct
3 report to me and then we're revitalizing the concept
4 of cognizant system engineers for the nuclear
5 crediting systems and system engineers for all of
6 the others.
7 But a simple example that was brought up
8 earlier, before the maintenance leader could decide
9 to change the nature of the PM -- or the frequency
10 of the PM. No more. Now the system engineer
11 defines the PM, and the system engineer has to agree
12 to any changes to the preventive maintenance.
13 So some of those checks and balances which
14 I think were probably in place at startup, you know,
15 weren't in place a year ago and we're
16 re-establishing those.
17 MR. SANTOS: Is it fair to say that you're
18 moving to a more integrated maintenance approach
19 whether it's -- regardless of whether classification
20 or nuclear versus nonnuclear?
21 MR. McQUINN: Yes. And not just
22 integrated, but raising the significance of the role
23 played by the system engineers, so that they keep an
24 eye not only on the nuclear safety envelope, but all
25 of the safety systems. And we've talked about

1 underground there are some that aren't driven by
2 nuclear that are just as important to us.
3 MR. SANTOS: I'll follow up. A recent
4 assessment by the Department of Energy Office of
5 Enterprise Assessment looking at your maintenance
6 programs said that you currently do not implement a
7 predictive maintenance program. And as you know,
8 you are in a little bit of a harsh deteriorating
9 environment. Could you comment on where you stand
10 with that recommendation?
11 MR. McQUINN: Yes. We're not where we
12 want to be in terms of predictive maintenance. I am
13 putting my priority on reestablishing the preventive
14 maintenance, but there are -- as an example, for
15 these uniquely important exhaust fans, these 860
16 alpha, bravo and charlie fans, we're implementing
17 more predictive approaches there. So right now the
18 top priority is on preventive maintenance, but we
19 are anticipating looking ahead to what many of the
20 other sites, the more mature sites, have done in
21 terms of predictive maintenance.
22 MR. SANTOS: A question to Mr. Franco. If
23 one were to look at the quick metric called
24 maintenance backlog and I were to look at it
25 previous to the event and today, do I see a

1 significant improvement on maintenance? Like for
2 example, how does today's maintenance backlog
3 compare to, let's say, a year ago?
4 MR. FRANCO: I would say that, you know,
5 if you look at back from the 2012 time frame when I
6 got here, that the backlog has remained about the
7 same. Because of the events and the focus on the
8 recovery and moving through, you can see there have
9 been a lot of pluses and then a lot of things that
10 continue to break as the facilities continue to age.
11 One of the things that we have done within
12 the Carlsbad Field Office is that back in 2013, in
13 October 2013, we initiated -- or FY-14 -- the first
14 major change to the fee structure for the
15 contractor -- actually the year before also -- is
16 that we used to -- really, the incentive was based
17 on cubic meters in place in the underground. After
18 we received a new contract in place and then we
19 started to put the performance management plans in
20 place to evaluate the contractor, we restructured
21 their fee to be based on the preventive and
22 predictive corrective maintenance and deferred
23 maintenance list.
24 So 75 percent of that fee then started
25 going back in. So again, that was implemented in

1 the FY2014 PEMP, that we call, and then we had the
2 events. So we were not able to get that fully
3 implemented.
4 That wasn't something that I was really
5 paying attention to. The new PEMP that we have for
6 '15 also has a huge amount of focus on the
7 maintenance and infrastructure upgrades for the
8 facility. It's important that we get that back up
9 and running.
10 MR. SANTOS: So Mr. McQuinn, can you give
11 an estimate of what's today's -- let's just pick,
12 for example -- preventive maintenance backlog in
13 terms of weeks?
14 MR. McQUINN: Yes. Right now my metrics
15 would clearly say that the backlog is not improved
16 compared to a year ago. That's the straight answer.
17 So we have metrics, I look at them every month, and
18 that's unsatisfactory.
19 Here's an interesting case. So I'm going
20 to bring this back to safety culture. I still have
21 a very heavy emphasis on the preventive maintenance
22 procedure must be adequate to my maintenance
23 mechanic, and if there's any question in your mind
24 about it, stop. The work control document -- you
25 must be happy with it. I don't say "happy." But so

1 right now I'm thanking everybody who stops. So
2 we're stopping way too much now.
3 I'm supposed to deliver more than safety.
4 I'm supposed to deliver work safely. So I have to
5 get more work done. And I can do that safely. Now,
6 in my culture plan, it's time for me now to not just
7 stop and thank everybody, but to begin talking to my
8 mechanics about the difference between what's a
9 fully adequate PM, a fully adequate work control
10 document, reviewed and approved by their brother and
11 sister mechanics versus what they prefer to have.
12 But I'm being very careful not to push too fast on
13 that concept and lose any ground on the idea that I
14 want the technical work instructions to be right.
15 But it's time in our culture improvement
16 plan to begin to talk about it is okay, you know,
17 there's a difference between what you would prefer
18 to have in your PM procedure versus what is fully
19 adequate. But right now the backlog is not
20 acceptable.
21 MR. SANTOS: Okay. My last question,
22 Mr. Hutton. So in your perspective, how far is WIPP
23 from your expectations of a hazard analysis to a
24 nuclear facility when it comes to maintenance? How
25 much more do they have to go, from your perspective?

1 MR. HUTTON: I think there's -- I have
2 seen improvement. For instance, when we drove
3 around, I was very happy to see, when I drove around
4 the underground yesterday, that the control doors
5 all worked. And I made the guy take me through
6 every control door so I could see it work. And I
7 wanted to satisfy myself that that was, you know,
8 the case.
9 So I think that there has been a degree of
10 improvement. Certainly some reliability
11 improvements have been made to the ventilation
12 system fans. You know, the contractor did quite a
13 bit of work with the vibration monitoring and
14 balancing of those fans to improve their
15 reliability. I think that's been significant.
16 There is still a lot of work to be done.
17 There's still a lot of degraded equipment. There's
18 still a number of components that need to be brought
19 up to, you know, what I would consider to be an
20 acceptable level of reliability and performance. I
21 don't know if I can give you a number to categorize
22 it.
23 MR. SANTOS: I just want to get your
24 sense.
25 MR. HUTTON: That's my sense of it.

1 MR. SANTOS: I appreciate your answer.
2 Thank you.
3 VICE CHAIRMAN ROBERSON: Thank you,
4 Mr. Santos.
5 Mr. Hutton, earlier both you and
6 Mr. Franco discussed some of the organizational
7 changes that are occurring on the DOE side, in
8 headquarters and your office. Mr. Whitney talked
9 about strengthening your office with additional
10 resources, and Mr. Franco spoke of reorganization
11 and increase in the number of resources in his
12 office, as well, too.
13 I guess my question is: In both cases --
14 and we'll start with you -- well, we'll start with
15 you, Mr. Franco. How will those actions improve
16 CBFO's ability to oversee maintenance and
17 engineering programs at WIPP?
18 MR. FRANCO: Okay. Well, back in the
19 organizational structure, what we had before, again,
20 you know, we were being challenged for head count at
21 the time, and one of the things that we had were
22 folks that actually had multiple hats that they were
23 wearing. We had SSOs doing the oversight that were
24 also doing the management for the project, and the
25 program management side, the schedule, scope, and

1 cost. And so they were balancing both activities as
2 they were doing the oversight function.
3 With the new organization and how we have
4 split that up, the focus from these individuals --
5 and we have one with more control. We have some for
6 each of the identified specific systems that we have
7 identified at the site and personnel coming in, and
8 they now focus on the actual oversight for those
9 items.
10 And the project management folks are
11 managing the project management piece of it and not
12 being engaged with, they do -- we have them
13 interface, of course, to make sure we're keeping an
14 alignment there. But the actual split provides us a
15 great opportunity for the oversight folks to focus
16 on what is important for the facility and be able to
17 just work on what is not being done, what is being
18 done, lessons learned from both sides, and making
19 sure that we are providing it.
20 So now, is that the only thing? No. One
21 of the other things that we continue to do is, again
22 the mentoring side of the house as we're getting
23 some new folks in, understanding the DOE processes,
24 making sure that we have the good mentors that have
25 years of experience within the department,

1 understanding what the oversight role is. Also,
2 we've hired some very experienced supervisors that
3 have come with a lot of experience that are driving
4 and helping work through this.
5 It's part of a culture change. Imagine
6 having somebody for ten years doing both jobs,
7 trying to split now and making sure that their only
8 focus mainly on the oversight. So that's where the
9 mentoring comes in from these other folks, and so
10 headquarters have been supporting us with that as
11 we've reached out to Richland, Los Alamos, Idaho,
12 getting those folks in Savannah River and Oak Ridge
13 to support the activity.
14 VICE CHAIRMAN ROBERSON: Are you having
15 to -- have you thought about whether you need to
16 make some additional investment in training? I
17 mean, I understand mentoring.
18 MR. McQUINN: Yes.
19 VICE CHAIRMAN ROBERSON: And understanding
20 the DOE requirements.
21 (A discussion was held off the record.)
22 VICE CHAIRMAN ROBERSON: So in addition to
23 mentoring, are there other investments that you
24 think will need to be made to ensure that the
25 investment of those resources and the time, the

1 increased time commitment, are going to pay off?
2 MR. FRANCO: Yes. Yes, the investment
3 that we're putting in with the training is also
4 something unique right now that I really am excited
5 about. We hired our nuclear safety technical
6 advisor, senior, and he has a lot of experience and
7 so the program the FAC Reps is now under -- he's
8 working on that and helping with the training
9 organization. We're hiring a training coordinator
10 to help with our training coordinator to expedite
11 some of these items.
12 We are all going to be -- I think it's
13 next week -- the forum for the training, and again,
14 it's also sending them out to another facility to
15 get -- see what's actually been happening out there.
16 Now, we actually started that before the events. We
17 were sending our FAC Reps out to other facilities.
18 We need to continue to do that and provide them
19 that. But the training is definitely a key
20 component. The qualification cards, all that
21 process we're working on and making sure that we
22 enhance that.
23 VICE CHAIRMAN ROBERSON: I think that's
24 good, because I think it's important even if you
25 were doing it before, I think it's important to

1 recalibrate after so people understand that
2 expectations may be different.
3 Thank you, sir.
4 Mr. Sullivan?
5 MR. SULLIVAN: Thank you. I want to come
6 back to the contractor assurance system,
7 Mr. McQuinn. In a moment I'm going to ask you if
8 you would sketch for me the Bob McQuinn version of
9 how the contractor assurance system should work in a
10 perfect world.
11 But back in the imperfect world of
12 Washington, D.C., we seem to fluctuate between when
13 the flap of the moment is cost overruns and schedule
14 delays, then there's just too much oversight. And
15 then the flap of the moment is something has gone
16 wrong, such as a security incident in 2012, Y12, in
17 Oak Ridge, or when we had the problems here at WIPP,
18 then the question for all the oversight folks is,
19 "Well, where were you? Why didn't you prevent
20 this?"
21 So we struggle with this and I know
22 already tonight we've mentioned that in addition to
23 your organization, Mr. McQuinn, trying to police
24 itself, you have CBFO, you have folks from the
25 Department of Energy headquarters including the

1 separate Office of Enterprise Assessments, you have
2 us, you have the State of New Mexico, the EPA has
3 been mentioned. So how does this work in a perfect
4 world?
5 MR. McQUINN: In a perfect world, I would
6 have a robust issues management system where my work
7 force, even my front-line workers, would believe
8 that I wanted them to write their issues down. And
9 I don't have that today. Okay? But they would
10 write their issues down. And there would be many of
11 them, so they'd be statistically significant.
12 I would be good at statistically trending
13 those to know, you know, whether the needle was
14 going up or down or staying level.
15 I'd have a set of metrics that would be
16 completely separate from production and obviously --
17 and my job is to get production done, but I'd have a
18 set of metrics that was aimed all around the safety
19 management programs and the integration of them.
20 I would be doing self-assessments, the
21 entire line management organization, all the
22 functions, doing hard-hitting self-assessments. And
23 then frequently, at least once a year, I would be
24 doing an integrated self-assessment, as much as is
25 possible through my contract assurance organization,

1 bringing people in that would tell me the truth
2 about how it was going and not that there would be a
3 requirement to do it, but I would do it.
4 And then all of that information would
5 come together to help me make money decisions, where
6 to put my staffing, basically to help me make
7 priority decisions about money and people, because
8 ultimately -- and where I'm going to focus my
9 attention.
10 We had an issues management system. It
11 was poorly fed. There weren't a lot of issues in
12 it. I want to be very careful that I don't just
13 pretend that if I fix every individual issue, that
14 will add up to the right answer, because I have been
15 places where I have tried to do this. So I need it
16 to all be integrated for me, and I have created a
17 new senior management board. Everybody has a board.
18 I call mine the Environment Safety Quality Review
19 Board, where I set policy and I make decisions about
20 trends and ultimately where to put priority.
21 And so one of my greatest fears is that
22 I'll allow the contractor assurance to be driven
23 just around individual issues and whether they're
24 all getting closed on time, which is important but
25 sometimes, if you're not careful, that becomes the

1 goal and you miss the bigger picture of where you
2 put your priority.
3 So to me, it's mostly about -- it's mostly
4 about setting priority properly.
5 MR. SULLIVAN: And you said you're not
6 there today, and I know that you personally have
7 announced plans to move on from this job. But I'm
8 going to assume that whoever comes in to take it
9 over from you is going to be just as good as you
10 are. How long do you see this process taking here?
11 MR. McQUINN: We have a very experienced
12 leader and a very experienced deputy, and I have the
13 money to staff the organization, some with
14 incumbents and some with temporary experienced
15 staff.
16 So I think in a year, you know, by
17 restart, I believe we can have an adequately
18 functioning -- not mature, like some of the sites
19 have -- but we can be on the right path. And my
20 successor, who I'm grateful that I got to
21 hand-choose, views things -- he's relieved me
22 before, he's followed me before, and he's been
23 through much of the same experience as I have, and
24 he views -- we tend to view things about the same
25 way.

1 MR. SULLIVAN: I appreciate the work that
2 you have done. I know it hasn't been easy. Thank
3 you.
4 VICE CHAIRMAN ROBERSON: Thank you,
5 Mr. Sullivan.
6 A question for Mr. Wyka. The radiological
7 release accident investigation report identifies a
8 reduction in conservatism in the documented safety
9 analysis and technical safety requirements and
10 throughout the day we've talked about some of those.
11 We talked about CAMs. We talked about the
12 underground ventilation. Even somewhere along the
13 way somebody mentioned the roof fall. So we talked
14 about some of those examples.
15 I guess what I'm more interested in is,
16 for one, the department has this requirement for an
17 annual review of this safety analysis. I'm assuming
18 the investigation team kind of looked at the changes
19 over time, and I guess what I'm wondering is: Is
20 that requirement robust enough? Was that review
21 occurring? Was it robust? So I'm asking you what
22 does the investigation team conclude or
23 investigation work conclude were the underlying
24 reasons why that deterioration was allowed to
25 continue over time?

1 MR. WYKA: If you look at some of the
2 specific examples, it did happen over time, you
3 know, sort of a change in this, you know,
4 significant reduction in level of conservatism. For
5 example, just elimination of a lot of changes or
6 SACs, specific administrative controls. There were
7 a handful of those that were sort of eliminated, as
8 well as even eliminating 15 out of 22 designed basis
9 accidents without really the technical evaluation to
10 support some of the changes being made. They
11 weren't also reviewed by the federal component
12 either, you know, the changes as those were made.
13 As well as you mentioned, Vice Chairman, just the
14 head of analysis didn't drive the appropriate
15 classification of some the key systems, like the
16 CAMs and some of the ventilation systems. In fact,
17 they sort of possessed the lowest classification
18 balance of the plant, could be taken out of service
19 prior to any DOE or NWP nuclear safety review.
20 You know, lack of -- so that also means
21 lack of TSR as limiting conditions of operations and
22 TSR surveillances associated with that, as well as
23 design and modifications not subject to the same
24 scrutiny, you know, because of the classification
25 that they had.

1 So this was over time and they were never
2 really reviewed or picked up in any assessments.
3 And we even found that looking at some of the --
4 both on a contractor federal level, some of the
5 reviews that should have been done on the design
6 basis weren't done, you know, on the periodicities
7 that they were supposed to be.
8 VICE CHAIRMAN ROBERSON: Thank you. So
9 this is actually a phenomenon the Board sees often
10 and we communicate to the department across the
11 department. So I guess in this particular example
12 as it relates to WIPP, I would ask you, Mr. Hutton,
13 what do you foresee as the actions to take so that
14 you don't see this cycle reoccur in the near term
15 future, at least?
16 MR. HUTTON: Yeah. Well, I think, first
17 of all, it's important that we have the right staff
18 at the facility and at headquarters to provide the
19 level of oversight for the foreseeable future that's
20 going to be needed. Not just at this site, but at
21 all the sites. That's -- you know, we won't be
22 successful without that.
23 Second, in the case of WIPP specifically,
24 you know, we have -- we know that the current DSA is
25 deficient. That's why we have these temporary

1 safety basis documents in place. And so building a
2 robust safety basis which, you know, we've directed
3 the contractor to do in accordance with the latest
4 standard, I think is exactly what's necessary to
5 build the basis beyond the safety envelope, I like
6 to call it, that will operate the facility within.
7 So you know, that's crucial, putting that
8 in place. And then we frankly are going to have to
9 be darned sure that we don't allow the resources
10 that put that in place to atrophy, you know, in the
11 future. That's going to be necessary.
12 One of the things that I have been working
13 on at headquarters, sort of beyond the specifics of
14 WIPP, is: You know, what are the implications of
15 this for our entire oversight program? In my view,
16 the oversight program -- I call it the blanket --
17 our oversight blanket needs to be big enough and
18 robust enough that it gets us information early
19 enough in time to intervene to change the outcome.
20 That's what we need.
21 And so I think that requires a
22 comprehensive approach where, you know, we
23 understand what all the functional areas are, we
24 understand that we periodically, you know, according
25 to some frequency at a minimum we have a baseline

1 inspection program or oversight program that we
2 apply. We have to have a certain number of
3 performance indicators that give us another look at
4 things. And then systematically we have to assess,
5 you know, what is this picture telling us? Where do
6 we see problems developing? Where do we see trends
7 developing? Where do we see something that might
8 cause us to intervene and change the outcome?
9 So that's what we're working to put in
10 place right now. I have shared some of that with
11 your staff, and John, I know, is aware of some of
12 that, of our current thinking. But that's what
13 we're working on right now, because I think, you
14 know, for the long haul, we have to have that
15 systematic comprehensive approach that give us
16 confidence that the whole -- that all the bases are
17 covered, you know, adequately and something isn't
18 slipping through the cracks; we're adequately
19 monitoring and we have thresholds that cause us to
20 take action, form reactive oversight where we see
21 problems developing, and hopefully intercede so that
22 we, you know, change the result, and prevent events
23 from happening. Because that's really what our
24 function is in the oversight world is, largely
25 preventive, you know. Support the mission success

1 by preventing the events which, as we see here, can
2 dramatically affect the success of the mission.
3 VICE CHAIRMAN ROBERSON: So the Board
4 actually issued a recommendation to the department
5 because it was concerned about kind of drift in this
6 area. And out of that came the revised 3009. Is
7 that going to be robust enough? I mean, I
8 understand it all has to do with people, but I guess
9 my question is: Are DOE's requirements robust
10 enough to help contribute to preventing that kind of
11 atrophy five years from now?
12 MR. HUTTON: I think the new version of
13 3009 is significant improvement. It took us a long
14 time to work through it. I'm sure it's not perfect.
15 I'm sure as we gain experience -- this will be a
16 valuable experience -- we'll find things that need
17 to be addressed in the course of utilizing it. But
18 it's clearly, in my view, easier to understand, it's
19 not as ambiguous as the previous guidance, it's much
20 more specific, it's much clearer. I think that's
21 helpful in terms of implementing the requirements.
22 So I think it's pretty good, frankly, right now.
23 You know, we'll find out as we implement it, but as
24 far as I can tell right now, you know, it does a
25 better job of spelling out for folks just what it

1 takes to develop the documented safety analyses. I
2 call it the instruction manual for how to write
3 documented safety analyses. That's basically what
4 it is. The nuclear safety requirements haven't
5 changed. The rule hasn't changed, but we've learned
6 over 20 years of implementing the old version of
7 3009 that, you know, we could be more specific, give
8 people clearer guidance, and so that's what we've
9 tried to do.
10 VICE CHAIRMAN ROBERSON: Okay. Did you
11 want to add anything, Mr. Franco?
12 MR. FRANCO: No. Just, you know, we're
13 following the lead with the headquarters folks.
14 We're implementing. I think that for me, again, we
15 talked about earlier the changes with all of these
16 things, as a site is doing real well, is to pay
17 particular attention to that, is my lessons learned
18 for me is, because those are the ones that we tend
19 to not focus on.
20 And so one of the things for me as lessons
21 learned as a manager here is that as these -- any of
22 these activities where you're giving them accolades
23 for a great job is also making sure that they -- you
24 know, that you're not removing the focus from them,
25 and also looking at when you do the changes to these

1 design bases, that in any of the changes that you
2 do, is really looking backward of all the changes
3 that have happened, because over the course of
4 transition as you're moving forward with all these
5 changes, then what happens is, you end up eventually
6 one day saying we had a lot of these changes that
7 contributed here just over the course of time.
8 MR. HUTTON: If I could add to that, you
9 know, I think it's very important that we not --
10 that we allow ourselves not to become, you know,
11 confident that things are going to go -- really go
12 well. Right? You know, anytime in my past lives
13 when I was confident that something was okay, I
14 could always live to regret it, I have got old scars
15 to prove it.
16 So you know, I think maintaining a healthy
17 anxiety, maintaining a little bit of skepticism
18 about, you know, are things really going to go right
19 and what is about to go wrong, that I need to
20 prevent, you know, I tell people, you got to ask
21 about 100 things for every one thing you find that
22 really has a problem, or you're not looking hard
23 enough.
24 And so you know, I think that's what we
25 need to do. I think we're going to need to continue

1 to do that going forward.
2 VICE CHAIRMAN ROBERSON: Thank you, sir.
3 To you, Mr. Santos.
4 MR. SANTOS: I would like to have some
5 quick follow-ups on the same line of questioning,
6 and it has to do with the 3009. And I'm very
7 encouraged by DOE applying this 2014 revision at
8 WIPP. Is it now part of the contract? Is it going
9 to be fully implemented without exception? Is it
10 now in the language?
11 MR. HUTTON: The contract -- the way we do
12 it, the contractor has been directed by a letter
13 from the contracting officer to implement the
14 standard. So you know that's what has to be done.
15 MR. SANTOS: So for the benefit of the
16 public, you mentioned there has been a lot of
17 improvement with the documents and that you guys
18 worked a lot harder on this document. From a
19 technical standpoint, can you give me one or two
20 examples of what are some of the major technical
21 improvements from the previous version for clarity?
22 MR. HUTTON: Sure. So the older version
23 of 3009 was not as precisely worded as we might have
24 liked. And so reasonable people could disagree over
25 whether this or that level of analysis in a

1 documented safety analysis actually met the nuclear
2 safety requirements in the rule. The new version of
3 3009 is much more precise in that it states clearly
4 if you meet all the applicable "shall" statements in
5 the standard, you are satisfying the rule. That
6 seems simple, but in the language of 20 years ago,
7 when the standard was written, that wasn't spelled
8 out quite so precisely. So that kind of thing, you
9 know, is I think extremely important.
10 MR. SANTOS: And any new type of analysis
11 be required or any -- I'm trying to get a little bit
12 of technical flavor --
13 MR. HUTTON: Well, it's very explicit
14 about analysis of system functionality. The new
15 standard is very explicit about making, you know, a
16 solid analysis that the systems will perform their
17 safety function, that they have the capacity and the
18 reliability and so on to do that. That's explicitly
19 described in the new standard, and wasn't as well
20 alluded to in the old one.
21 So you know, I think over a period of
22 about 20 years with the old standard, there were a
23 lot -- there was a lot of knowledge in the
24 department, in DOE, about what it took to
25 satisfactorily implement the requirements of the

1 rule, but it wasn't all spelled out, you know, as
2 well. So I don't know if that makes sense.
3 MR. SANTOS: Okay. And my last question
4 has to do with: It's my understanding that this is
5 the first implementation of this version in the
6 complex here at WIPP.
7 MR. HUTTON: That would be. I can't speak
8 for what other programs may or may not be doing.
9 MR. SANTOS: Okay. Any special
10 consideration or concerns given that WIPP is
11 undergoing so many changes and they're going through
12 this maturity such that your return on investment
13 might not get diminished -- as you're trying to
14 implement 3009, you think it's good, but we are
15 trying to implement it on a site that's going
16 through a tremendous amount of change. Any words
17 there?
18 MR. HUTTON: Well, one way or another the
19 nuclear safety rule hasn't changed, and we have to
20 meet it. So if I was going the write a DSA, I would
21 want to use the best instruction manual possible to
22 do that. And this one I believe is, and the
23 Department believes is, and I think your staff, you
24 know, would agree with that.
25 It's a challenge to do it, okay, so that

1 means that we need to apply the right resources to
2 assist the site, the CBFO and the contractor in
3 doing that. So what we've done is, we've marshaled
4 resources -- in fact, a lot of the people that we
5 had at the workshop that we conducted on the DSA
6 development were the folks who wrote the standard,
7 who can authoritatively describe: This is what
8 we're trying to get at here, you know, when people
9 have questions, or they don't understand.
10 And we have those folks involved in the
11 in-process reviews, which is a process that is
12 described in DOE Standard 1104 for developing safety
13 evaluation reports. We have those people involved
14 in real-time working with the contractor to assure
15 that nothing languishes, that they get the immediate
16 real-time feedback that they need to produce, you
17 know, a high-quality document but as effectively and
18 as efficiently as we possibly can.
19 MR. SANTOS: Thank you.
20 MR. HUTTON: That's what we've tried to do
21 to make that really solid. And putting together, I
22 believe, the safety basis review team that we put
23 together, I mentioned it at the beginning of the
24 other session, it's co-led by one of my staff along
25 with Jeff Carswell, who's the nuclear safety senior

1 technical advisor at CBFO, very sharp guy, a lot of
2 experience at Savannah River; Dr. Robert Nelson,
3 from my staff, very sharp guy, also intimately
4 involved with the development of the new 3009 and in
5 training folks across the complex in its use. We
6 brought that training program to the site, to CBFO,
7 and conducted it in order to -- you know, so they
8 didn't have to go anywhere, so we brought the
9 training to them so we could give them the best leg
10 up we possibly could to help them be effective in
11 implementing it.
12 MR. SANTOS: Thank you for that response.
13 I'm done with questions, Madam Vice Chair.
14 VICE CHAIRMAN ROBERSON: Thank you,
15 Mr. Santos.
16 Mr. Sullivan, any additional questions for
17 now?
18 The Board may have questions for the
19 record that we'll submit to each of you. We want to
20 try to stay on our schedule.
21 I think, though, one thing I'd say as we
22 are starting to close out this session, Mr. Sullivan
23 mentioned, Mr. McQuinn, that you at some point would
24 be leaving and I, too, want to echo my appreciation
25 for the hospitality that you have extended to us

1 here at the site during your tenure.
2 And Mr. Franco, we understand there has
3 been an announcement, as well, and I personally
4 would like to tell you I have walked this plant with
5 you, I know of your commitment to the community and
6 to the operations, I know the employees and the
7 public around this area really appreciate your
8 commitment, and I wish you well and I'm sure we'll
9 see you in the next chapter. Thank you so much.
10 Thank you both.
11 So you're excused from the witness table.
12 Thank you all for your testimony.
13 I'd also like to acknowledge, if they're
14 still here, I understand we had some staff from
15 Senator Tom Udall's office, or if you're here,
16 you're welcome to stand. They may have left. But
17 they were here, and we appreciate it.
18 And also I understand we had some staff
19 from the New Mexico Environment Department. Are
20 they still here? Thank you very much. We
21 appreciate your attendance.
22 This now concludes the hearing portion of
23 this proceeding. I want to reiterate that the
24 record for the hearing portion of this proceeding
25 will close on May 25, 2015. So if any member of the

1 public would like the Board to consider any
2 additional statements or information on the topics
3 presented in Session 1 or 2 this afternoon, or from
4 the third session this evening, please mail or
5 e-mail them to the Board by that date. This
6 includes those individuals from the public who have
7 viewed this hearing via live video streaming on the
8 Internet.
9 Contact information to send in additional
10 information can be found on the Board's public
11 website, DNFSB.gov.
12 At this time I'd like to take a short
13 recess and we will reconvene in five minutes for the
14 meeting part, Session 4, of this public hearing and
15 meeting.
16 (Recess from 7:43 p.m. to 7:48 p.m.)
17 VICE CHAIRMAN ROBERSON: At this time, I
18 would like to transition to the final part of
19 today's proceedings and convene an open meeting of
20 the Board.
21 This meeting is convened under the
22 Government in the Sunshine Act as noticed in the
23 Federal Register and is open to the public. In this
24 meeting the Board will review and discuss its
25 planned approach to providing oversight of DOE

1 activities to recover the underground and resume
2 waste operations at WIPP. The public will have an
3 opportunity to provide comments during the meeting.
4 I will begin the meeting by turning to the
5 other Board members for their opening remarks.
6 Mr. Sullivan.
7 MR. SULLIVAN: Thank you, Madam Vice
8 Chairman. I look forward to hearing from the staff
9 on what we're going to do, and as I heard from the
10 staff earlier, we've looked at ourselves with
11 respect to what we did as an organization prior to
12 these accidents and from the perspective of what
13 might we have done better. So I think this is a
14 useful exercise, and I look forward in this meeting
15 to hearing on how we're going to improve our own
16 performance going forward as an oversight agency
17 with the goal, of course, of improving operations
18 here at WIPP. Thank you.
19 VICE CHAIRMAN ROBERSON: Thank you,
20 Mr. Sullivan.
21 Mr. Santos?
22 MR. SANTOS: I have no remarks.
23 VICE CHAIRMAN ROBERSON: Thank you,
24 Mr. Santos.
25 The Board now recognizes Mr. John Pasko,

1 who is standing in for the technical director of our
2 staff. He is going to briefly describe the staff's
3 proposed plan for WIPP in fiscal year 2015, to set
4 the stage for the Board's final deliberations and
5 vote on the plan.
6 Mr. Pasko, please proceed with your
7 statement and report.
8 MR. PASKO: Thank you. Good evening,
9 Madam Vice Chairman and members of the Board.
10 (A discussion was held off the record.)
11 MR. PASKO: I thank you for the
12 opportunity to be here tonight. I intend to present
13 Mr. Stokes' testimony, and then I look forward to
14 the opportunity to be able to talk about what we did
15 following the WIPP events as far as our own
16 development of lessons learned and corrective action
17 that we've put in place going forward.
18 So I'll now continue with Mr. Stokes'
19 remarks. He had planned to present the technical
20 staff's proposed work plan for the remainder of
21 fiscal year 2015 to the Waste Isolation Pilot Plant.
22 However, before discussing the plan, Mr. Stokes
23 wanted the following information to be presented as
24 background.
25 On March 5, 2015, the Board officially

1 approved the Office of Technical Director's work
2 plan for fiscal year '15. The plan accounted for
3 work at WIPP in addition to the remainder of the
4 technical work throughout the Department of Energy
5 complex for fiscal year '15.
6 The proposed WIPP work plan discussed this
7 evening is derived from that original Office of
8 Technical Director fiscal '15 work plan, meaning
9 that the resources devoted to the proposed plan at
10 WIPP did not deviate from the work plan that has
11 already been approved by the Board. Moreover, the
12 as-proposed WIPP work plan presented tonight does
13 not reduce or adversely impact the oversight of
14 planned activities for other defense nuclear
15 facilities.
16 Now, the proposed WIPP work plan for the
17 remainder of the year, fiscal year, identifies the
18 following work areas: Development of revised safety
19 related documents. These reviews will evaluate the
20 adequacy of the safety basis development and
21 implementation, including reviews of the Department
22 of Energy review and approval of the evaluation of
23 nuclear safety. I'm sorry. And approval.
24 The second part: The evaluation of
25 nuclear safety systems. These reviews will evaluate

1 the adequacy of structured systems and components
2 relied upon for safety. This area includes design
3 and construction for new or modified safety systems,
4 such as the ventilation systems.
5 The work plan also accounts for the
6 evaluation of safety management programs. These
7 reviews will evaluate the content and implementation
8 of the safety management programs. They may include
9 fire protection, emergency preparedness and
10 response, conduct of maintenance, electrical safety,
11 and conduct of operations.
12 Also, the plan accounts for the
13 observation, evaluation of WIPP operational
14 readiness activities. These reviews will evaluate
15 the Department of Energy and the contractor
16 preparation for the resumption of operations at
17 WIPP.
18 We will also evaluate the operational
19 awareness at WIPP. The staff has planned site
20 visits for the specific purpose of evaluating and
21 observing ongoing DOE and contractor activities.
22 The following proposed reviews are being planned.
23 For safety basis related reviews, the objective is
24 to evaluate the adequacy of the hazard evaluation
25 performed by DOE, the identification, adequacy, and

1 implementation of nuclear safety-related controls,
2 and the contractor's ability to conduct work safely
3 at the WIPP site. These reviews will also evaluate
4 DOE's ability to effectively oversee the WIPP
5 contractor.
6 The proposed safety basis related reviews
7 will require four Board staff members with the
8 appropriate level of expertise. For the proposed
9 reviews of our safety systems, our objective is to
10 evaluate the adequacy of the ventilation systems.
11 These reviews will require three of the Board staff
12 with appropriate expertise.
13 For the proposed reviews of safety
14 management programs, our objective is to evaluate
15 the current adequacy and DOE's planned improvements
16 for safety management programs. We propose that
17 these reviews will be initiated during the remainder
18 of fiscal year 2015 in two of the following areas.
19 And I say two of the following, because we tee up
20 five. The department and WIPP have demonstrated
21 that these should be available to review in 2015,
22 but we will pick the first two that are available
23 out of this group of five and commence that
24 activity.
25 So we propose reviews in the following

1 areas: Fire protection, emergency preparedness and
2 response, conduct of maintenance, electrical safety,
3 and the conduct of operations.
4 The resources required for these reviews
5 are five of the Board staff with the appropriate
6 levels of expertise. Proposed reviews in the area
7 of operational awareness will evaluate DOE and
8 contractor activities to maintain operational
9 awareness and identify negative trends and safety
10 performance.
11 The staff is planning for three site
12 visits between May 2015 and the end of September.
13 The proposed work plan just described reflects the
14 Board staff's current understanding of DOE and
15 contractor activities at the WIPP site and as
16 mentioned previously, reflects the Board's overall
17 oversight priorities throughout the DOE complex.
18 Additionally, the staff has begun planning
19 for work conducted in fiscal year 2016. Work that
20 will be proposed by the technical staff to the Board
21 for the WIPP site in fiscal year 2016 will be
22 developed consistent with the Board staff existing
23 operating procedures and at the present time is
24 expected to include proposals for the technical
25 staff's review of DOE and contractor readiness

1 reviews and the continuation of any of the items
2 mentioned above.
3 That concludes Mr. Stokes' remarks. If
4 you have any questions, I'm ready to try to answer
5 them now.
6 VICE CHAIRMAN ROBERSON: Thank you,
7 Mr. Pasko.
8 Mr. Sullivan, do you have any questions?
9 MR. SULLIVAN: Yes, thank you. Mr. Pasko,
10 would you elaborate on the review that was done by
11 our own staff regarding our own performance as an
12 agency in oversight of activity at WIPP? So
13 specifically, just by way of background, for the
14 fire accident that happened last year, we look back
15 and the Board had identified back in 2011 time frame
16 some significant issues here with fire hazard
17 analysis and with combustibles that were beyond the
18 loading that was necessary. Yet it appeared that
19 the actions taken here locally were not what they
20 probably should have been in response to that, and
21 so perhaps our follow-up was lacking with respect to
22 the rad release incident.
23 The documented safety analysis had been
24 revised here locally over the course of some years
25 from like 2008 up until 2014, and although we

1 routinely review documented safety analysis
2 throughout the complex, I don't think we reviewed
3 the documented safety analysis here during that time
4 frame.
5 So opportunities we had as an agency to
6 perhaps provide the type of advice that would have
7 either avoided or mitigated the accidents, we didn't
8 get. So I think we've looked at ourselves, and
9 would you please elaborate on what came out of that
10 review?
11 MR. PASKO: Thank you, sir. Well, as you
12 know, I took over responsibility for the NMPS group
13 in May of last year. About that time, at the
14 Board's urging, you were interested in what lessons
15 learned had been developed from the Board's
16 perspective. That married up pretty well with my
17 new responsibilities, so I volunteered to take the
18 lead on that effort.
19 There were ten lessons learned overall. I
20 would say that a handful are particularly germane,
21 starting with the decision was made long ago not to
22 have a site representative located here in Carlsbad
23 onsite, as we do at Los Alamos and Oak Ridge and so
24 on. So without an onsite representative, the amount
25 of oversight you're able to do is limited. You only

1 gets what's reported to you. You don't get the
2 ability to observe and develop your own set of
3 concerns and indicators.
4 Another problem that was identified --
5 what we tended to do at the sites without site reps
6 is report periodically on what was happening. We
7 tended to tell the news instead of identify what
8 potential issues were. So we weren't really
9 aggressive in the way we produced our oversight.
10 As a sidebar to that, there was not a
11 feedback function to develop people's ability to ask
12 good questions, the ability to ask why that happened
13 and pull the string. So at the WIPP site and the
14 others that were without site reps, we have a
15 limited picture of what's actually occurring.
16 I would say the staff did not aggressively
17 follow up on the corrective action being taken for
18 the concerns and issues that they developed. As you
19 alluded to, we had done a review of FHA and found
20 issues with combustible loading in the mine, but it
21 still remained there on the 5th of February last
22 year.
23 And I would say the last one that was
24 particularly germane is that we have gone a long
25 time since we did an actual review of the documented

1 safety analysis here at the WIPP site.
2 So they're the lessons that I think that
3 we developed that are most applicable. If I may,
4 I'll continue on.
5 You know, coming into the job, my real
6 question was: What don't I know I don't know? So
7 here at the WIPP site, you know, we had convinced
8 ourselves that things were more secure, safer than
9 they actually were. What other things don't we
10 know?
11 So in response to the lessons learned and
12 with that thinking, I developed a corrective action
13 plan that I'd like to go over, if you'd like to hear
14 that.
15 So what we're trying to do now is track
16 our oversight and increase the level of oversight
17 that's provided. So as a metric, we are on a
18 monthly basis tallying up the amount of effective
19 oversight that we have here at the WIPP site and at
20 the other non-site-rep sites: Idaho National Labs,
21 Sandia, Nevada, and Lawrence Livermore.
22 What we're trying to do at the sites is
23 risk-rank the DSAs, the documented safety analysis.
24 We just completed that at the Idaho site, and we
25 determined, you know, a ranking of what we should

1 look at, and now we're going to proceed to work our
2 way through those DSAs, and WTP is the first DSA.
3 We just kicked that review off last month. So we're
4 going to do that at the other sites, as well.
5 In the Hanford area, I have a particular
6 concern with the amount of facilities that are no
7 longer in operation but are not in the D&D process
8 yet that haven't been looked at. So they're in a
9 cold standby condition, and they're difficult to get
10 into, so you can't really walk through them and
11 assess their material condition. And we haven't
12 really paid attention to those.
13 I also am interested in getting better
14 analysis and reports from the cognizant engineers
15 who are on staff and responsible for these sites so
16 we have implemented a process where they provide a
17 weekly written report, much like the site reps do,
18 on a weekly -- excuse me, a monthly report much like
19 the site reps do on a weekly basis. So hopefully
20 that will allow us on a periodic basis, recurring
21 basis, to get some insight into what's going on at
22 these sites, and it's long enough that, you know,
23 there have to be some issues there.
24 Now, I have been doing that for four
25 months now at the Idaho and the WIPP site, and we've

1 made significant progress in the quality of those
2 reports and the type of issues that are being
3 developed. So I think that has -- that looks like
4 it's going to provide us some positive results.
5 And also we've improved the qualification
6 process for these people being assigned as cognizant
7 engineers. So it's now formalized, there's some
8 quality control, and hopefully we'll develop a
9 better backup cognizant engineer for these sites, so
10 he's going to have to be a little bit more
11 aggressive and he's going to have to be a little
12 more intent on developing issues.
13 And lastly, we've committed to two weeks'
14 programmatic onsite reviews at these sites each
15 quarter.
16 So I think those things taken together
17 will help us be able to identify, you know, those
18 things that we didn't really know we didn't know.
19 And I'm particularly interested in not only the
20 corrective action here at WIPP, but what's the next
21 event that we aren't smart enough to be looking at.
22 Okay.
23 MR. SULLIVAN: So that's reflected in this
24 plan. We still don't have an onsite site rep, but
25 we will have at least two weeks onsite per quarter?

1 MR. PASKO: We're trying to get two weeks
2 of onsite, two man weeks onsite per month at WIPP
3 and Idaho and the other sites.
4 MR. SULLIVAN: Okay. And there will be a
5 monthly report that I'll get to see?
6 MR. PASKO: There will be a monthly
7 report. The monthly report will have a section
8 where we track the number of days that month and the
9 year to date on oversight, so you can see if we're
10 behind or, you know, on track.
11 And we also will have a list of the things
12 that the site -- you know, we requested from the
13 site that we haven't yet accomplished. So for
14 example, with the DSA review, we understand which
15 chapters of the new DSA revision 5 are proposed, and
16 we have a due date. We have a tracking system so we
17 make sure that we don't forget those things that
18 we're waiting for, you know, to review for adequacy.
19 So those things we're doing differently.
20 MR. SULLIVAN: Thank you.
21 VICE CHAIRMAN ROBERSON: Thank you,
22 Mr. Sullivan.
23 Mr. Santos, do you have any questions?
24 MR. SANTOS: Yes, Madam Vice Chairman.
25 Thank you, Mr. Pasko. Could you elaborate

1 a little bit what's going to be different or more
2 unique about these three site visits that you
3 mentioned in terms of the approach you use? Some
4 more specifics of what --
5 MR. PASKO: We really didn't have anybody
6 that periodically came out here. So now we have a
7 pool of folks that were previously site reps. We
8 have one individual was a site rep in Hanford, who
9 is now located out west and is conveniently able to
10 fly, to visit, our Idaho site, our Nevada site, and
11 this WIPP site here. So we've taken -- we've
12 created a pool of folks who had the experience of
13 having been onsite at one of our manned sites, and
14 we're using them to look at the conduct of
15 operations, the day-to-day maintenance, get a flavor
16 for how well the site is performing. They have kind
17 of a jack-of-all-trades experience base, and based
18 on what they identify, it will help us be able to
19 target programmatic reviews in particular areas.
20 MR. SANTOS: So for clarification, there
21 will be a monthly report generated by the cog
22 engineer. Will there also be like a trip report?
23 MR. PASKO: Yes. We'll make weekly
24 entries, and those reviews we do like of a
25 programmatic review, we'll do what we do everywhere

1 else. There will be an agenda developed, there will
2 be a weekly entry when that agenda is sent to the
3 site. There will be a weekly entry when that visit
4 is complete. And then whether it -- we'll make an
5 assessment of what we found and it will either be an
6 information report or we'll elevate it to, you know,
7 an issue report.
8 MR. SANTOS: Will all these be publicly
9 available?
10 MR. PASKO: Only the ones that rise -- as
11 we do right now, the things that rise to the level
12 of an issue, that merit, you know, becoming a Board
13 issue, and are communicated to the Department of
14 Energy or NNSA, they're publicly posted.
15 MR. SANTOS: Like for example, the
16 weeklies, they follow a process and eventually
17 get --
18 MR. PASKO: We've not made a determination
19 yet on whether the monthlies will get published on
20 the -- you know, put on the website. I think the
21 technical director wants to watch that process for a
22 couple of months before he makes a recommendation to
23 you all if we should do that. It's been discussed.
24 MR. SANTOS: Okay. And I have a follow-up
25 on the issue of follow-up. As a new Board member, I

1 come in and I look at the public website, and I can
2 see our recommendations and I can see which ones are
3 open, which ones are closed. But I couldn't do the
4 same regarding with a lot of the letters that the
5 Board issues when it comes to identification of
6 issues and how those issues are followed up to
7 completion in a more transparent manner.
8 What are your thoughts on that? I'm
9 especially reacting to your earlier testimony --
10 explanation that some of the self-reflection was the
11 Board-issued letters, some of those issues never
12 were followed up.
13 MR. PASKO: One of the things that came
14 hand in hand -- it's not really part of my
15 corrective action plan, but the Board has been
16 working hard the last year or two years to develop a
17 set of procedures to control the way it does
18 business. And it also has developed an information
19 tracking system that we now proceduralize entries
20 that have to be made.
21 So when an issue -- when the Board does a
22 review and identifies an issue they think is a
23 safety issue, it's required to be entered in that
24 IACTS system. When we present that information to
25 you all and you agree it's an issue, then it's

1 elevated to a Board issue and it's tracked that way.
2 So if we were to provide correspondence to
3 the department on a series of issues here at WIPP,
4 our procedures would now require us to make an IACTS
5 entry on each of those individual issues. And we
6 report the IACTS number when we write the issue
7 report to you, so there's a kind of -- we close the
8 loop, and then that IACTS system is reviewed
9 periodically to determine that those tracking --
10 issue tracking dates are up to date, they haven't
11 fallen in arrears, and then we have the performance
12 assessment group just periodically does a review.
13 In fact, I just got an e-mail today saying
14 that mine are all up to date. They have
15 congratulated me on that. So there's a system to
16 kind of follow up to make sure those issues get
17 logged and then that they aren't forgotten.
18 MR. SANTOS: Since a letter on issues are
19 made public, do you have any opinion on increasing
20 the transparency of that tracking of issues to
21 interested members of the public?
22 MR. SULLIVAN: Well, if I may, let me jump
23 in. Because I think what Mr. Pasko is giving us is
24 a good tool used by the technical staff, but they
25 use tools that are for us. You're looking for a

1 tool for the public. I'm not sure that tool would
2 translate to the public. But there are certain
3 things that I think we can do. They just fall in
4 our IT department, which is outside of the technical
5 staff. It resides with our general manager. But I
6 agree with you. I think there's an awful lot we can
7 do on our website. The public looks at a letter in
8 2011 that we sent, and there's no way to tell, just
9 looking at the website, what happened as a result of
10 the letter.
11 MR. SANTOS: At a new Board member, I went
12 through that myself.
13 MR. PASKO: From my perspective, we would
14 not want to publicize an issue that is still at the
15 staff level and have it be confused as a Board
16 issue. We reserve -- you're right -- to determine
17 whether those issues are --
18 MR. SANTOS: No, I'm just exploring the
19 concept at this point. I'm not looking for a final
20 solution. Just to kind of air out some of the
21 concepts.
22 VICE CHAIRMAN ROBERSON: Do you have more
23 questions?
24 MR. SANTOS: One last question. Have the
25 staff communicated clearly to DOE what sort of list

1 of documents and by which dates you need to be
2 inserting yourself in the reviews so this federal
3 effort is kind of well-coordinated and laid out?
4 MR. PASKO: There's a process to do that,
5 and I would tell you that the process it followed
6 works. But there's some -- there's nonuniformity.
7 Some sites do this better than others. Some
8 cognizant engineers track it better than others.
9 Hence, you know, this formal qualification process
10 so we can take the best practices that we have and
11 institutionalize those, because if you ask for
12 documents from a site and they don't provide them
13 and you don't ask again, well, you have kind of
14 eroded, you know, your credibility.
15 So it's important to ask for what you
16 want, and track what you get, and not ask again for
17 documents because you don't want the site to waste
18 their time reproviding it. But you need to have a
19 trackable system to be able to make sure you're
20 getting what you want when you need it.
21 Now, I have tried -- there are two schools
22 of thought on reviews of a documented safety basis.
23 For example, you can review it in parallel with the
24 department, or you can wait for the department to
25 complete their review and then review.

1 Now, there's pros and cons to each. I
2 particularly prefer to do them in parallel, and
3 then, you know, it's easier to come to a consensus
4 on what things need to be improved.
5 For the WIPP DSA, we have an extensive
6 schedule built, chapter by chapter, of the DSA and
7 TSRs. We have teams built to do the initial review
8 and teams built to do the follow-on review, and we
9 just received the second chapter of the DSA
10 yesterday, and we have a system set up to track
11 that, so that we don't cause any unnecessary delay
12 in the approval of that document.
13 MR. SANTOS: Thank you. That concludes my
14 questions.
15 VICE CHAIRMAN ROBERSON: Thank you,
16 Mr. Santos.
17 Mr. Sullivan has another question.
18 MR. SULLIVAN: Just a procedural. We're
19 over 15 minutes past the point where we were going
20 to have the public comment period. I can ask my
21 question now or we could take comment from the
22 public and we come back to my question.
23 VICE CHAIRMAN ROBERSON: The public may
24 benefit from hearing your question. We have a short
25 list of speakers so I would say ask your question.

1 MR. SULLIVAN: Okay, I'll go ahead. One
2 of our speakers from the public who stood up this
3 afternoon asked if we were going to track whether or
4 not the judgments of need got completed from the
5 Accident Investigation Board reports, so I will turn
6 around and ask you.
7 MR. PASKO: We intend to do that.
8 MR. SULLIVAN: Okay. Will we be
9 evaluating those independently of DOE? In other
10 words, when we say we're tracking them, we're not
11 just going to take -- you know, are we simply taking
12 a report from DOE that suggests we did it?
13 MR. PASKO: No, I think what -- we will
14 track the completion of all of those but they fall
15 into different areas. You know, some of those are
16 headquarters, some of those are the field office.
17 We will particularly look at those aimed at the
18 safety basis, nuclear safety, and the safety
19 management programs. They're the ones that fit in
20 directly with our oversight.
21 And also those that -- you know, one of my
22 concerns -- and it was mentioned today, you know, we
23 have a mine and we have a nuclear facility. And I
24 personally think the most challenging area is going
25 to be converting this to changing that culture of

1 operations. So all the judgments needed in that
2 area, we'll have a program to review those and
3 assess that they have been -- because I think that's
4 where the --
5 MR. SULLIVAN: Just to reiterate, then,
6 I'm just going to repeat back what I heard from you
7 to make sure I heard it right. With respect to
8 judgments of need dealing with nuclear safety issues
9 here at WIPP, when the question -- when I ask a
10 question to our staff of whether or not that
11 judgment of need got accomplished, I'm going to get
12 an answer that reflects our staff's independent
13 review of what actually happened, as opposed to
14 simply getting, "Well, yes, the Department of Energy
15 has reported it complete." Is that correct?
16 MR. PASKO: Yes, sir.
17 MR. SULLIVAN: Okay. Thank you.
18 VICE CHAIRMAN ROBERSON: Any additional
19 questions, Mr. Sullivan?
20 MR. SULLIVAN: No.
21 VICE CHAIRMAN ROBERSON: Mr. Santos?
22 MR. SANTOS: No, Madam.
23 VICE CHAIRMAN ROBERSON: At this time, per
24 the Board's practice and as stated in the Federal
25 Register notice, we will welcome comments from

1 interested members of the public. A list of those
2 speakers who have contacted the Board is posted at
3 the entrance to this room. There is also a table at
4 the entrance to the room with a signup sheet for
5 members of the public who wish to make a statement
6 but did not have an opportunity to notify us ahead
7 of time. If you wish to make a statement and have
8 not yet signed up, you may add your name to the list
9 at this time.
10 Mr. Kovac. I will add you to the list.
11 MR. KOVAC: Thank you.
12 VICE CHAIRMAN ROBERSON: Do we have
13 another? Mr. Hardy? Is that what it was?
14 MR. HARDY: Correct. Thank you.
15 VICE CHAIRMAN ROBERSON: Thank you.
16 Seeing none other, your names have been added to the
17 list and I think we are done with that process.
18 We've generally -- well, you know how
19 we've listed the speakers. I just listed them.
20 Those who have added their names on the sign-up
21 sheet will follow those who had already registered
22 with us in order to afford everyone the opportunity
23 to speak.
24 Please remember, the chair may interject
25 if a speaker exceeds five minutes, but will then

1 give consideration for additional time should the
2 agenda permit.
3 Statements should be limited to comments,
4 technical information or data concerning the subject
5 of this public meeting and hearing. The Board
6 members may question anyone making a statement to
7 the extent deemed appropriate.
8 I do want to make clear that while the
9 Board will be providing the opportunity for public
10 comment during this meeting, unlike the hearing
11 portion of this proceeding that we held earlier
12 today, where the record closes May 25, 2015, once
13 the business of this meeting ends and we adjourn,
14 there will be no additional comment opportunity and
15 the record of the meeting will be closed.
16 And with that, we'll begin. Our first
17 speaker -- and I hope I have this right --
18 Mr. George Anastas.
19 MR. ANASTAS: Start the clock, five
20 minutes.
21 Thank you, Vice Chairman Roberson, members
22 of the Board, and staff. My name is George Anastas.
23 I'm a professional nuclear engineer, board certified
24 health physicist, board certified environmental
25 engineer, fellow of the Health Physics Society and

1 also a fellow of the Australasian Radiation
2 Protection Society. I cut my teeth in this business
3 in 1966 at Purex, in the 200 area. So I have about
4 50 years' worth of hands-on -- that may not be the
5 right word -- experience in this.
6 I have one comment which follows the last
7 question. Will the Board staff assure that there
8 are no cross-impacts of these fixes that were talked
9 about today, and their implementation of the fixes?
10 So two key things. Cross impacts of the fixes, and
11 the implementation of the fixes. You don't have to
12 answer the question, but it's something that you
13 might want to think about.
14 Second of all is that I'm a proponent of
15 knowledge management. Waste drums in the complex
16 have detonated, caught fire, over the years. A
17 reference, a great reference is out of Nuclear
18 Safety, volume 33, number 2, April-June 1992, pages
19 220 to 228. "An Assessment of the Flammability and
20 Explosive Potential of Defense Transuranic Waste."
21 I did not write the paper. But it's an excellent
22 paper. The staff may wish to get that.
23 I'm going to take a second and read a
24 conclusion from that 1992 paper if I can get some
25 light here. "The evidence also indicates the

1 accidents such as fires and explosions have occurred
2 at several facilities in the DOE complex because
3 guidelines and procedures have been inadequate,
4 improperly used, or not used at all. That
5 observation suggests the future accidents of a
6 similar nature must be anticipated, that workers
7 need to be aware of the potential hazards of working
8 with these materials, and that clear and consistent
9 guidelines and procedures should be in place and in
10 force to ensure maximum safety," et cetera, et
11 cetera. 1992. I didn't write it. But it fits the
12 situation very well.
13 Last item. I spent the last ten, fifteen
14 years doing accident investigations, not only in the
15 United States, but overseas, as well. George
16 Santana -- and I'm going to quote from him -- "Those
17 who cannot remember the past errors are condemned to
18 repeat the errors."
19 So knowledge management is an important
20 consideration in nuclear mine safety, and what I'm
21 recommending to the Board for your deliberation is
22 suggest to DOE that pull all this information
23 together about the drums, make it available, and
24 test the people who are packing the drums and the
25 supervisors for the drums.

1 In my experience at a glove box, if a drum
2 is spewing yellow-orange smoke, there's something
3 very wrong with that. Okay? And you can't just
4 dismiss it.
5 Last item. Safety culture has been
6 bandied about. There's safety leadership that comes
7 from the top. Now, the safety culture is developed
8 by the people implementing the work. If they see
9 that there's a disconnect between what the
10 leadership says and what the leadership does, what
11 are the workers going to do? This is what they're
12 doing. Okay? So don't pin it all on the folks
13 doing the work that leadership has to follow up on
14 what they say. What they say and what they do have
15 to be the same. And then the workers will pick that
16 up and the safety culture can be brought up.
17 Last item. WIPP worker morale. That's
18 something I think the board should focus on, because
19 the folks doing the work there have been beaten over
20 the head for quite a while. They have had a number
21 of problems there. So anything the Board can do --
22 is anyone here from DOE? Anything that the Board
23 can do to assist in the morale will really help the
24 recovery of the WIPP. That's it.
25 VICE CHAIRMAN ROBERSON: Thank you, sir.

1 Thank you so much.
2 Do any of the Board members have a
3 question for Mr. Anastas? All right.
4 Thank you, sir, so much.
5 Mr. Scott Kovac.
6 MR. KOVAC: Thank you, Madam Chair and
7 members of the Board. I just wanted to say a quick
8 thank-you, and I wanted to appreciate the fact that
9 the safety board is one of the few eyes that the
10 public has into the inner workings of DOE, and I
11 really appreciate any more documents that you make
12 public, any more transparency. I appreciate the
13 work you do. Thank you.
14 VICE CHAIRMAN ROBERSON: Thank you,
15 Mr. Kovac. Thank you so much.
16 And Mr. Hardy.
17 MR. HARDY: Thank you again for the
18 opportunity to speak. I appreciated the comments
19 earlier, Mr. Santos, about thinking of ways to
20 provide additional fire protection capability in the
21 underground. What I would ask is that if your group
22 makes a recommendation, that you consider the
23 environment in which that equipment will operate.
24 The underground, of course, is a salt area; it's
25 very corrosive, it's very dusty. So smoke detection

1 devices are likely to get clogged pretty quickly,
2 and any type of fire suppression system, especially
3 if it's water-based or metal, is likely to corrode
4 or deteriorate very quickly. So keep those items
5 under concern, or under your, you know, purview as
6 you make those recommendations.
7 Case in point. I think one of the reasons
8 the automatic fire suppression systems were
9 disengaged on the salt trucks were because they were
10 difficult to maintain and that they were subject to
11 accidental discharge. And so because of those
12 issues, they were switched to a manual system. I'd
13 hate to see a lot of money and time and effort spent
14 on a fire protection system get implemented that is
15 either, A, difficult to manage or maintain; or B,
16 that is undone in a year or two because of the
17 corrosive environment.
18 So thank you.
19 VICE CHAIRMAN ROBERSON: Thank you,
20 Mr. Hardy. Does either of the Board members have
21 any questions for Mr. Hardy?
22 Are there other comments from the public?
23 Hearing none -- I'm sorry? Yes, sir.
24 MR. WALTERSCHEID: Okay. Madam Chair,
25 thank you for asking for other comments. My name is

1 James Walterscheid. I'm a farmer in Otis. One of
2 my hay buyers lives on the Mobley Ranch. It's on
3 Mobley Ranch Road. He told me when this accident
4 happened, they weren't aware of it for quite a
5 while, they weren't aware of it for quite a while,
6 and they were pretty upset that I guess whoever was
7 operating the WIPP site didn't inform them. I think
8 they informed Stacy Mills, who's a rancher nearby,
9 but not them. So that's something I just wanted to
10 point out. Thank you very much.
11 VICE CHAIRMAN ROBERSON: Sir, could you
12 spell your last name for me?
13 MR. WALTERSCHEID: Okay.
14 W-A-L-T-E-R-S-C-H-E-I-D.
15 VICE CHAIRMAN ROBERSON: Thank you so
16 much. Thank you for your comment.
17 Are there any other public comments? Yes,
18 sir.
19 MR. FLETCHER: I'm Kenny Fletcher. I'm an
20 editor with Weapons Complex Monitor, and I wanted to
21 follow up on the idea of the monthly reports from
22 the sites that do not have representatives. The
23 weekly reports from the site reps have been a
24 valuable source of information for me, and I would
25 strongly urge the Board to make those monthly

1 reports public.
2 VICE CHAIRMAN ROBERSON: Thank you,
3 Mr. Fletcher.
4 MR. FLETCHER: Thank you.
5 VICE CHAIRMAN ROBERSON: Any other
6 comments from members of the public? Hearing none,
7 the floor -- Mr. Pasko, you may resume your regular
8 seat -- the floor is now open for Board member
9 discussion of the work plan, the public comments,
10 and everything associated with that.
11 MR. SULLIVAN: May I be recognized?
12 VICE CHAIRMAN ROBERSON: Mr. Sullivan, you
13 are recognized.
14 MR. SULLIVAN: So I think the plan is a
15 good one. The three reviews with three to four
16 people per review here between now and September for
17 a 100-person agency -- that's a pretty good
18 investment.
19 I also think we run the risk -- we have to
20 be careful because we run the risk of basically
21 playing our version of Whack-A-Mole. They had a
22 problem here, so now we're going to go look here,
23 and meanwhile, we're the other place that might have
24 a problem.
25 So we have to be careful not to

1 overcommit, and I think the staff has struck the
2 right balance with the work plan that has been
3 presented to us, so I intend to support it.
4 I think there's some issues here that we
5 probably should consider. I think one of them,
6 Mr. Anastas just mentioned, and it was about testing
7 people on what they know. I think generally
8 speaking throughout the DOE complex, this is an area
9 that we may want to look at. It would be separate
10 from our WIPP-specific work plan, but the training
11 and specifically the testing done within the
12 Department of Energy and its various contractors
13 seems to me to be very inconsistent. Even where the
14 training is good in terms of the training that they
15 give their people initially, or even follow-up
16 training and recurring training, what I don't see,
17 which I am used to in rigorous nuclear training, is
18 written exams with rigorous grading in order to make
19 sure that people really do know what they're
20 supposed to know.
21 And I'm not aware of any DOE requirements
22 for this sort of thing. And so, for example, the
23 rad release incident here may have uncovered an
24 example where out in Los Alamos the people who were
25 responsible for creating the procedures, doing the

1 technical engineering for mixing waste -- if those
2 folks had at some point been asked the question
3 whether or not you should mix nitrate salts with
4 organic kitty litter on a written exam, we might
5 have avoided all of this, assuming it was graded
6 properly.
7 So I think we ought to take a look at that
8 area, but I think the staff should consider that. I
9 know the staff is probably already working on our
10 follow-on plan for the next fiscal year. That might
11 be an area where we should consider looking at.
12 And I think long-term here at WIPP, we
13 should also just think about a follow-on
14 opportunity. I think the great risk is not actually
15 in the immediate future, when they have had the
16 problem, they have gotten an lot of attention,
17 they're going to get a lot more attention because
18 there are regulators out there that they actually
19 have to satisfy. I mean, we are in an advisory
20 role, but they're going to have to satisfy the State
21 of New Mexico and they're going to have to satisfy
22 EPA on some things. And in doing that, much work
23 will be done and much attention will be paid.
24 The question, of course, is going to be
25 two, three years down the line, how much of it

1 remains, how much -- you know, if there are
2 judgments of need which are decided, you know, which
3 DOE evaluates and says, "Well, there are some
4 follow-on things to do, but that doesn't need to
5 happen prior to resuming waste operations," once the
6 waste operations actually begin, will those get
7 appropriately tracked?
8 So I think we ought to probably think
9 about perhaps coming back maybe in two years to look
10 at, okay, now that all of the dust has settled from
11 this and the waste operations have begun again and
12 are in full swing -- which I certainly hope for the
13 good of the nation and the complex that that is true
14 in two years -- then we should be perhaps
15 considering coming back to look at the overall state
16 of affairs here at WIPP and making sure that the
17 fixes that were made were, in fact, permanent.
18 Thank you.
19 VICE CHAIRMAN ROBERSON: Thank you,
20 Mr. Sullivan.
21 Mr. Santos.
22 MR. SANTOS: Thank you, Madam Vice
23 Chairman. I also think the plan is a good one. I'm
24 very interested to get an understanding and see how
25 the staff will leverage all their findings to the

1 other sites as they go through their own reviews.
2 They're going to go -- you are going to find best
3 practices issues, and making sure that that is
4 disseminated throughout the entire Board staff, it's
5 very important that it happens.
6 And so I don't know what sort of processes
7 need to be updated to make sure that flows
8 naturally, and we don't have to do like, oh, after
9 we do all these reviews, now we have to go back and
10 see what we can learn. I would like to see that
11 kind of flow out of the work plan as they go through
12 it.
13 And as I expressed earlier, I'm very
14 interested to following Board-approved procedures
15 and processes to try to encourage and make as much
16 as we can publicly available and transparent, and
17 that's something we can have further discussions on
18 at a later date, even separate from this plan before
19 us.
20 That's all.
21 VICE CHAIRMAN ROBERSON: Thank you,
22 Mr. Santos.
23 I too agree with a lot of the comments
24 that my fellow Board members have made. I think we
25 do have to be careful not to take all of our assets

1 and run to one place when there are so many eyes
2 watching. But we have to make sure the activities
3 we do undertake are really going to be the ones that
4 count as it relates to our function and mission for
5 assuring nuclear safety.
6 I do also agree that once we are out of
7 the test mode, the Board should determine if there
8 is -- if the monthly reports are something that
9 would benefit the public from being made public.
10 But I do want to make sure that we -- it's a new
11 animal the staff is creating, and we need to let
12 them get out of test mode.
13 I also think -- I don't think it affects
14 the staff's work plan directly, and if it does, I
15 think it's something the Board could decide and
16 modify later. I do believe that a Board member
17 should conduct another visit to this site before the
18 fiscal year is over, as well, too. I think those
19 visits do help drive organization of things like the
20 status of corrective actions and other things, and
21 although I do not recommend it as a modification to
22 the proposed work plan today, I think it's something
23 I would ask the Board to consider as a modification
24 to the work plan at some day not too distant from
25 today. But today I plan to support the staff's

1 proposed work plan because I think it is
2 comprehensive, I think it addresses the key areas
3 that the Board should be looking at, and I think it
4 incorporates the lessons learned that the Board
5 should be implementing.
6 So those would be my comments.
7 MR. SULLIVAN: I would add that Dan and I
8 had good fajitas last night at Lucy's, and so you
9 need to come back so that you can have good fajitas
10 at Lucy's.
11 VICE CHAIRMAN ROBERSON: I would happily
12 do it.
13 Any other comments from Board members?
14 Are we prepared to vote on the staff's proposed work
15 plan?
16 MR. SULLIVAN: I'll be happy to make a
17 motion. I'm so recognized?
18 I move that the Board approve the work
19 plan for the Waste Isolation Pilot Plant that is
20 dated April 2015.
21 MR. BATHERSON: Madam Vice Chairman, the
22 action on which Mr. Sullivan has moved for a vote is
23 approval of the staff's proposed work plan for safe
24 recovery and resumption of operations. At this
25 point I will proceed to call the roll of the Board

1 members for their vote.
2 Mr. Santos?
3 MR. SANTOS: Aye.
4 MR. BATHERSON: Mr. Sullivan?
5 MR. SULLIVAN: Aye.
6 MR. BATHERSON: Ms. Roberson?
7 VICE CHAIRMAN ROBERSON: Aye.
8 MR. BATHERSON: Hearing three votes to
9 approve, the proposed work plan is approved.
10 VICE CHAIRMAN ROBERSON: Thank you,
11 Mr. Batherson.
12 Do the Board members wish to move for a
13 vote on any other proposal for Board member action
14 not specifically set out in the agenda but related
15 to the business of this meeting? Mr. Sullivan?
16 MR. SULLIVAN: No, ma'am.
17 VICE CHAIRMAN ROBERSON: Mr. Santos?
18 MR. SANTOS: No, ma'am.
19 VICE CHAIRMAN ROBERSON: Having concluded
20 the voting process, with that I am going to turn to
21 the Board members for their closing comments, and
22 then I will end with my own comments.
23 Mr. Sullivan.
24 MR. SULLIVAN: Thank you. I think this
25 has been a useful exercise. I have learned a lot.

1 I know that there's a lot of attention on this site,
2 and I know that there's a lot of people working hard
3 to get this site back up and running, and I think
4 it's very necessary for the country that that
5 happen.
6 I think it's very unfortunate that it took
7 accidents in order to get the attention of people in
8 charge in order to make certain fundamental
9 corrections, and I hope that as a Defense Nuclear
10 Facilities Safety Board, we can help the department
11 avoid that in the future.
12 Thank you.
13 VICE CHAIRMAN ROBERSON: Thank you.
14 Mr. Sullivan.
15 Mr. Santos.
16 MR. SANTOS: Thank you, Madam. As we
17 know, given all the deficiencies identified and the
18 events itself, it could have been much worse than it
19 actually happened, and I think this is a great
20 opportunity to learn the lessons learned and to not
21 minimize them, so they are not quickly forgotten,
22 and they actually get more institutionalized, not
23 only throughout DOE, but nationwide and also even
24 internationally, so we can all remember and avoid
25 repeating the mistakes.

1 I know there's a lot of attention right
2 now. I'm very concerned about the long-term
3 sustainability of all those improvements. And one
4 item we didn't talk about is also the aging work
5 force, the turnover, the changes, and how is all
6 that going to be managed and provide that
7 sustainability? So that is something I personally
8 would like to continue to explore, not only on WIPP
9 but across the complex as I visit the various sites.
10 I again want to thank everybody, from the
11 people in Carlsbad, the workers, they're very hard
12 workers and I'm very proud of their work. The
13 partnership, the DOE leadership, and our own staff
14 for all the support. Everyone's trying to do the
15 right thing, but we all recognize there's a lot of
16 work. So we just have to be ever vigilant when it
17 comes to safety. And it's something we can never
18 rest. So with that I conclude my remarks, and thank
19 you.
20 VICE CHAIRMAN ROBERSON: Thank you,
21 Mr. Santos.
22 You took many of the words right out of my
23 mouth. I think the only thing that I would add is,
24 this is the first public hearing that the Board has
25 conducted in Carlsbad, and so we appreciate your

1 patience and your attendance.
2 I want to thank all of our witnesses for
3 their statements, for their answers, and for their
4 patience. I want to thank our staff and I want to
5 thank my fellow Board members. And mostly, I want
6 to thank our staff, the Board staff. This is the
7 first public hearing we've had in Carlsbad, and it
8 may be the only the second public hearing that the
9 Board has conducted. So we understand the
10 importance of the mission of this site. We
11 understand how important it is to assure that it
12 restarts safely, and we will be watching.
13 And with that, this concludes this public
14 meeting of the Defense Nuclear Facilities Safety
15 Board. We are now adjourned. Thank you for
16 attending.
17 (The proceedings adjourned at 8:43 p.m.)
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1 STATE OF NEW MEXICO
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2 COUNTY OF BERNALILLO
3
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