

MINUTES
of the
JOINT MEETING
of the
RADIOACTIVE AND HAZARDOUS MATERIALS COMMITTEE
and the
LOS ALAMOS NATIONAL LABORATORY OVERSIGHT COMMITTEE

November 4, 2005
Conference Center (Room 203AB), Los Alamos Research Park
Los Alamos

The joint meeting of the Radioactive and Hazardous Materials Committee and the Los Alamos National Laboratory Oversight Committee was called to order at 10:05 a.m. on Friday, November 4, 2005, by Representative Roberto "Bobby" J. Gonzales, co-chair, Los Alamos National Laboratory (LANL) Oversight Committee.

Radioactive and Hazardous Materials Committee

PRESENT

Rep. John A. Heaton, Vice Chair
Rep. Donald E. Bratton
Rep. Manuel G. Herrera
Sen. Carroll H. Leavell
Rep. Antonio Lujan
Sen. Richard C. Martinez
Rep. Jim R. Trujillo
Rep. Jeannette O. Wallace

ABSENT

Sen. Phil A. Griego, Chair
Sen. Vernon D. Asbill
Sen. John T.L. Grubestic
Sen. Gay G. Kernan

Advisory Members

Rep. Thomas A. Anderson
Rep. Nick L. Salazar

Sen. Mary Jane M. Garcia
Sen. Clinton D. Harden, Jr.
Sen. William H. Payne
Sen. John Pinto
Rep. Avon W. Wilson

LANL Oversight Committee

PRESENT

Rep. Roberto "Bobby" J. Gonzales, Co-Chair
Rep. Thomas A. Anderson
Sen. Richard C. Martinez
Rep. Jane E. Powdrell-Culbert
Rep. Debbie A. Rodella
Rep. Nick L. Salazar
Sen. William E. Sharer

ABSENT

Sen. Phil A. Griego, Co-Chair
Sen. John T.L. Grubestic
Sen. William H. Payne

Advisory Members

Rep. Ben Lujan
Rep. Jeannette O. Wallace

Sen. Ben D. Altamirano
Sen. Mary Jane M. Garcia
Sen. Stuart Ingle

Staff

Evan Blackstone
Cleo Griffith
Tim Crawford

Guests

The guest list is in the meeting file.

Copies of all the handouts and written testimony are in the meeting file.

Friday, November 4

Welcome

Fran Berting, chair of the Los Alamos County Council, welcomed the committees to Los Alamos and LANL.

Consent Order on Environmental Remediation and Cleanup

Dave McInroy, deputy program director for LANL Environmental Remediation and Surveillance, presented overviews of LANL's environmental remediation program and the LANL consent order. He discussed the major responsibilities of LANL Environmental Remediation and Surveillance, which include investigating and completing remediation of historically contaminated sites and working closely with the Department of Energy (DOE) and the New Mexico Department of Environment (NMED) to ensure that appropriate priorities and approaches are being addressed. LANL has over 800 sites to investigate and remediate, while about 200 sites are still actively being used and will not be remediated. Pursuant to the LANL consent order, cleanup on the sites must be completed by 2015.

Turning to the LANL consent order, Mr. McInroy explained that LANL worked with NMED for three years on the order, beginning in November 2002. After a lengthy negotiation process, the order was finally signed and issued in March 2005. He stated that the purpose of the consent order is to prioritize contamination investigation activities, provide minimum investigation requirements and prescribe cleanup levels and schedules for work plan submittals, reporting and remedy completions. The order contains 100 major milestones that are to be completed by 2015, including deadlines for completion reports at major material disposal areas and aggregate areas. Mr. McInroy pointed out that NMED has already proposed the slippage for some of these milestones. He also informed the committees that the consent order contains standard legal provisions for dispute resolution and covenants not to sue. Mr. McInroy went on to explain the cost estimates and budget allocations for the LANL consent order. Ninety-three percent of the Environmental Remediation and Surveillance annual budget is devoted to implementation of the order.

Finally, Mr. McInroy reviewed LANL's 2005 accomplishments regarding the consent order and the planned work for 2006. He stated that for 2005, all the consent order milestones for deliverables were achieved on or before their due date, 14 areas of concern were remediated, a high volume of characterization activities were completed and 1,055 inspections were completed at 294 sites. In 2006, LANL plans to execute its fieldwork and reporting as required to meet all the consent order deliverables.

James Bearzi, bureau chief of NMED's Hazardous Waste Bureau, also presented the committees with information on the LANL consent order. According to Mr. Bearzi, NMED's approach to cleanup at LANL is how it can be accomplished in the best interest of the public. He explained that the consent order primarily came about due to the frustration of many entities with the pace of corrective action at LANL. The order accelerates that pace and establishes a framework within which LANL can conduct and report on its investigation and cleanup activities.

Mr. Bearzi also discussed NMED's sources of legal authority under the LANL consent order. These include the New Mexico Hazardous Waste Act (HWA) and the New Mexico Solid Waste Act (SWA). While the consent order relates to corrective action pursuant to the HWA and SWA from LANL's past contamination activities, Mr. Bearzi pointed out that LANL must also take corrective action for its current hazardous waste activities pursuant to its Resource Conservation and Recovery Act (RCRA) permit issued by NMED. Mr. Bearzi went on to review some of the LANL consent order's highlights for the committees. He discussed the order's provisions on ground water contamination investigations and monitoring, cleanup of material disposal areas, the process for investigation and corrective measures and the schedule for completion. Additionally, Mr. Bearzi stated that allowing for public participation in the process is an important part of the order.

Finally, Mr. Bearzi discussed the challenges NMED faces in implementing the consent order. These challenges include the complexity of the order and the LANL facility, unforeseen circumstances and public involvement. Mr. Bearzi emphasized that the primary challenge is the lack of resources in NMED. The Hazardous Waste Bureau does not have enough staff, contractors and funding in its budget for implementation of the order. Because of this problem, NMED and the National Nuclear Security Administration (NNSA) that oversees LANL entered into a memorandum of agreement (MOA) in September 2005 that sets up a funding mechanism for fiscal year 2006 to help the state carry out its regulatory duties. The MOA contains \$1.3 million, which will be deposited in the state's Hazardous Waste Fund for additional personnel and operating costs for NMED. Mr. Bearzi urged the committee to support legislation that codifies these types of agreements.

Questions and comments included:

- the number of deliverables per site and the characterization of sites under the consent order;
- which entity sets the priorities for cleanup under the order;
- what role the Northern New Mexico Citizens Advisory Board plays in the consent order process;
- what type of corrective action LANL takes when contamination migrates to an aquifer;
- how members of the public who are upset with the LANL cleanup can be appeased;
- how much funding NMED needs to keep on track with its regulatory duties under the consent order;
- how much of the cleanup duties has been subcontracted to local small businesses;
- the need of the legislature to review the qualifications of NMED employees working on LANL cleanup;
- discussion of a letter from the committees to the Legislative Finance Committee and the executive, supporting the MOA and the creation of additional full-time employees for the Hazardous Waste Bureau; and
- how much money LANL has spent on cleanup in fiscal year 2006, as opposed to previous years.

Environmental Stewardship Overview

An overview of LANL's environmental stewardship was presented to the committees by Ken Hargis, acting division leader of LANL's Environmental Stewardship Division. He began by discussing LANL's top performance priorities, which include safety, security, compliance and the environment. Specifically, Mr. Hargis explained that his division is responsible for LANL's compliance with state and federal environmental regulations, environmental surveillance, environmental legacy cleanup, pollution prevention, environmental management and legacy waste management. He emphasized that the division consists of environmental professionals who are committed to LANL's mission, to protecting the environment and to working openly with LANL's regulators and the public.

Mr. Hargis next discussed, in detail, LANL's two environmental strategic goals: compliance excellence and continuous risk reduction. To implement the goal of compliance excellence, major air, water and hazardous waste permitting is required for LANL's facilities. Mr. Hargis described the use of LANL's environmental self-assessment program as a tool to ensure compliance for over 400 sites at LANL that store hazardous waste. He also explained that his division conducts numerous reviews of new projects and that management consistently reviews environmental performance. Mr. Hargis pointed out that the volume of hazardous waste sites at LANL makes it difficult to manage; however, he highlighted that NMED inspection results confirm that LANL is improving.

Turning to the goal of continuous risk reduction, Mr. Hargis stated that the division tries to go beyond compliance to improvement of quality of life. For example, LANL is improving

staff environmental awareness at the working level and has made commitments for nearly 600 environmental improvement actions. Additionally, LANL is working on aggressive pollution prevention and the laboratory has an on-site recycling center that recycles 60 percent of LANL's solid waste. Finally, Mr. Hargis discussed how LANL is making efforts to reduce radioactive waste, including transuranic (TRU) and low-level waste, as well as PCBs.

Questions and comments included:

- a request for more specific details of LANL's continuous risk reduction;
- the responsibilities of the Environmental Stewardship Division beyond the boundaries of LANL;
- the type of toxic chemicals used by LANL employees and the procedures for using those chemicals; and
- LANL's measurements on foodstuffs, including the monitoring of bees and honey to determine whether there is contamination.

Northern New Mexico Citizens Advisory Board (NNMCAB)

J.D. Campbell, chairman of the NNMCAB, encouraged the committees to support amendments to the HWA that would allow NMED to use MOAs with individual site operators, in lieu of general fee schedules, as a method of funding cleanup actions. He emphasized that the small staff at NMED would not be able to implement the strict compliance schedule and review process outlined in the consent order. Therefore, permitting NMED to enter into MOAs would provide the necessary funding that NMED needs to fulfill its regulatory duties. Mr. Campbell stated that NMED should also have the authority to hire outside expertise and consultants to aid its work. Additionally, he informed the committees that NNMCAB does not support the DOE's decision to expand low-level radioactive waste disposal to Area G in 2006.

Questions and comments included:

- discussion of NNMCAB's meetings being scheduled to accommodate the public;
- whether NNMCAB has technical expertise on its board;
- the benefits of a third party that oversees NMED, LANL and DOE and that reports back to NNMCAB;
- whether NNMCAB is wholly independent from DOE if appointed by DOE; and
- how NNMCAB is funded.

Water Quality Program

Steven R. Rae, group leader, LANL Water Quality and Hydrology Group, presented an overview of LANL's water quality compliance activities. Mr. Rae reviewed the group's broad responsibilities and LANL's various water permits regarding effluents and storm water. He explained that the National Pollutant Discharge Elimination System (NPDES) outfall permit is one of the main permits that regulates 17 LANL outfalls, including its sanitary wastewater treatment plant and its radioactive liquid waste treatment facility. The group also works on compliance for LANL's multiple storm water permits, including a multi-sector general storm water permit that encompasses 27 operating facilities and 17 storm water construction permits for 45 construction sites. Mr. Rae informed the committees that LANL signed a Federal

Facilities Compliance Agreement (FFCA) in February 2005 and has worked closely with NMED on locating storm water runoff sites at or near the laboratories.

Mr. Rae summarized the group's water protection and monitoring activities. These include compliance with dredge and fill permits, maintenance of aboveground storage tanks and the development of containment plans for spills. In addition, Mr. Rae described LANL's progress on the ground water monitoring portion of the LANL consent order and informed the committees that his group submitted a site-wide monitoring plan in May 2005. Furthermore, his group performs environmental surveillance reports for ground water, surface water and sediments.

Finally, Mr. Rae outlined the water quality goals and achievements and the remaining permit issues of the LANL group. He stated that the reduction of outfall types over the past decade has reduced NPDES compliance violations. Additionally, LANL is maintaining 91 percent storm water construction permit compliance for 2005. Lastly, LANL is expecting a new NPDES outfall permit to be issued by the Environmental Protection Agency (EPA) in 2005.

Questions and comments included:

- the volume of water migrating from LANL discharges into the Rio Grande;
- the type of containment structures surrounding LANL's aboveground storage tanks;
- how far south on the Rio Grande the LANL group conducts its monitoring activities;
- the extent of contamination from the Cerro Grande fire on the upstream and downstream areas of LANL; and
- how NMED primacy over the NPDES program would impact LANL.

Air Quality Program

David P. Fuehne, acting group leader, LANL Air Quality and Meteorology Group, stated that his group's responsibilities are divided into regulatory services and environmental surveillance. With regard to regulatory services, the group is in charge of ensuring LANL's compliance with the New Mexico Administrative Code and with the permits issued under Title V of the Clean Air Act that include regulation of LANL's radioactive air emissions. Mr. Fuehne explained that LANL has 28 stacks that are continuously monitored for radioactive emissions and 80 non-monitored stacks that do not meet EPA's threshold for monitoring. The group also uses ambient air monitoring stations to measure radioactivity in the air around LANL.

Mr. Fuehne also reviewed his group's environmental surveillance programs that evaluate laboratory impacts on air pathways, identify areas for operational improvements and produce an annual environmental surveillance report. He pointed out to the committees that a typical New Mexico resident is exposed to about 400 millirem of background radiation and that LANL operations contribute, at most, an additional 10 millirem to the public. Mr. Fuehne went on to summarize the group's meteorology program, which provides ozone assessment to the Four Corners region, and the ambient air monitoring program, which monitors about 50 locations in

and around Los Alamos County for radionuclides. As a final point, Mr. Fuehne discussed the group's issues currently in progress with NMED, including open burn permits, Title V permit modifications and working with NMED on enforcement interactions.

Questions and comments included:

- what circumstances led to an increase in 2005 of the off-site dose level of radioactive air emissions from LANL;
- LANL's pit productions and what effect they have on an increase in air emissions; and
- how far outside the boundaries of LANL that air monitoring is conducted.

WIPP Shipments and Legacy Waste Status

The committees received a status report on LANL's legacy waste and shipments to the Waste Isolation Pilot Plant (WIPP) from Tom Starke, acting deputy program director of the LANL Legacy Waste Disposition Project. Mr. Starke began by explaining that since 1997, LANL has been required to dispose of its TRU waste. Most recently, pursuant to the LANL consent order, LANL must dispose of its TRU waste from Area G by 2015. Consequently, Mr. Starke stated that the mission of the Legacy Waste Disposition Project is to dispose of legacy mixed low-level and TRU wastes located at Area G in order to reduce the risk to the nearby community of White Rock and so that the environmental corrective actions can be completed by 2015, thereby ensuring LANL compliance with the LANL consent order.

Mr. Starke next reviewed the kinds of legacy waste at LANL and how the waste is characterized, repackaged and shipped to WIPP. He pointed out that the hottest type of radioactive waste at LANL, remote-handled waste (RHW), cannot yet be shipped to WIPP because the WIPP facility is waiting on a permit modification from NMED that will allow WIPP to receive and store RHW. Mr. Starke also discussed LANL's shipping schedule of TRU waste to WIPP in relation to other DOE sites that ship TRU waste to WIPP. Since resuming its shipments in April 2005, LANL has made 37 shipments to WIPP that consist of 832 drums of TRU waste; Mr. Starke emphasized that this volume of shipments measures as the best rate in LANL's history. Although LANL will be making a small number of shipments to WIPP from October through December 2005 due to the large volume of waste WIPP will be receiving from other DOE sites, he pointed out that LANL shipments will increase for 2006.

Mr. Starke went on to summarize the partnership, roles and responsibilities of LANL and the Carlsbad Field Office Central Characterization Project (CBFO-CCP) for shipments to WIPP. LANL undertakes the preparation of drums for shipment, and the CBFO-CCP characterizes, certifies and ships the waste. He praised the work of the CBFO-CCP and stated that LANL has taken advantage of CBFO-CCP's waste management expertise and is making many improvements to the shipment process. Mr. Starke accentuated the need for WIPP's permit modification to store RHW in order to make shipments more efficient and to move more waste off the LANL site.

In closing, Mr. Starke highlighted LANL's and CBFO-CCP's excellent partnership, their accomplishments for 2005 and the work plan deliverables for 2006. Key points raised by Mr. Starke were the resumption of TRU waste shipments in 2005, the planned increase in shipments to WIPP in 2006 and achieving permit modifications for RHW.

Questions and comments included:

- what percentage of radioactive waste is shipped from other locations to LANL to be received and processed;
- the receipt of waste from sites in Idaho and the volume of characterization performed at LANL;
- what happens to the storage of liquid waste; and
- the estimated time frame to complete hearings on the permit modifications for RHW.

Airborne Spectral Photometric Environmental Collection Technology and Other LANL Support to the Hurricane Katrina Response

The director of the Los Alamos Center for Homeland Security, Dr. J. Wiley Davidson, provided the committees with a presentation on LANL's integrated reachback activities for hurricanes Katrina and Rita. Integrated reachback activities are the on-call, real-time analytical support provided in situations ranging from natural disasters to weapons of mass destruction incidents. Dr. Wiley explained that one of LANL's integrated reachback activities is airborne spectral photometric environmental collection technology (ASPECT). ASPECT is airplane-borne and uses detection and imaging capabilities to identify chemicals in the atmosphere. The EPA operates the plane that employs ASPECT; however, LANL provides emergency response data analysis to state and local first responders. The technology looks at emissions made from the ground as the plane performs multiple passes over a particular site. Dr. Wiley emphasized that this data is extremely valuable for chemical terrorist attacks, as well as natural disasters such as hurricanes Katrina and Rita. To date, the ASPECT aircraft has responded to over 40 incidents nationwide and has directly supported the United States Secret Service during the last eight national special security events.

Dr. Wiley went on to discuss in detail how ASPECT was used in response to hurricanes Katrina and Rita. For hurricane Katrina, ASPECT made 14 flights over New Orleans, three flights over Mississippi and three flights over southern Louisiana. During those flights, ASPECT detected five fires in New Orleans, performed imagery of numerous railcar locations, found hot railcars and located missing chemical tanks blown away from facilities. The data helped the EPA, the city of New Orleans, the National Guard and the state of Louisiana develop action items for addressing the disaster. For hurricane Rita, Dr. Wiley stated that the ASPECT deployment was still ongoing, but that the plane had made seven flight runs over Texas and three flight runs over Louisiana. The ASPECT had located and analyzed emissions from multiple fires, as well as plumes released from facilities in the Port Arthur and Beaumont areas. As with hurricane Katrina, the data was used to assist rapid assessment teams, the EPA, the Federal Emergency Management Agency and the states of Texas and Louisiana in responding to Rita.

Questions and comments included:

- whether ASPECT can be used from a satellite instead of an aircraft;
- how close the ASPECT aircraft has to be to plumes for detection and analysis; and
- what agency deploys ASPECT.

Coalition for LANL Excellence (CLE)

Robert Gibson and Joe Ladish, members of CLE, expressed their concerns to the committees regarding the impending change in management contractors at LANL. They explained that CLE was formed in response to the perceived need to address issues concerned with the rebidding of the LANL contract. CLE is primarily concerned about maintaining the ability of LANL to carry out its mission and conduct excellent scientific research programs by providing the incentives necessary to attract and retain the best talent.

Mr. Gibson and Mr. Ladish described the details of the contract transition process for the committees and said that the mission of LANL is likely to be redefined during that process. They emphasized that any loss of LANL-related jobs will have a detrimental economic impact throughout northern New Mexico and that LANL employees are currently experiencing anxiety and stress over this uncertainty. To ensure a positive end result in the contract transition process, Mr. Gibson and Mr. Ladish stated that a number of important stakeholders will have to be involved. They indicated to the committees that the New Mexico Legislature's role in state government policy will play an important part in shaping the future of LANL. Both presenters stressed that LANL is a national treasure and an important local employer. They urged that the committees help affect the contract transition process in a manner that leads to a good result for LANL's employees and the local community.

Questions and comments included:

- how CLE views the state legislature's role after the contract is awarded; and
- the impact of the gross receipts tax on the contract transition process.

Other Committee Business

The minutes of the September 20, 2005 Radioactive and Hazardous Materials Committee meeting were approved as written, by unanimous consent.

The minutes of the August 24, 2005 LANL Oversight Committee meeting were approved as written, by unanimous consent.

There being no further business, the committees adjourned at 4:25 p.m.