



Northern New Mexico Citizens' Advisory Board Meeting

September 19, 2007

2:00 p.m. to 8:30 p.m.

Santa Fe Community College, Jemez Complex

6401 Richards Avenue

Santa Fe, New Mexico

ATTENDING:

NNMCAB Members-

J. D. Campbell, Chair

Fran Berting, Vice Chair

Pam Henline, EMSR Committee Chair

Terry Boyle, EMSR Committee Vice Chair

Ralph Phelps, WM Committee Chair

Larry Rapagnani WM Committee Vice Chair

Barbara Gonzales

Robert Gallegos

Gerald Maestas

Donald Dayton

Susan Crutchfield

Mike Loya

NNMCAB Nominees-

George Heindel

Karen Torres

Jane Gaziano

Antonio Lopez

Lucy Foley

Kathleen Hall

Lawrence Longacre

Ken LaGattuta

Joey Jablonski

Bernadette Pesenti-Valdes

Eva Artschwager

Kyo Kim

Richard Lehmann

NNMCAB Excused Absence-

David Church

Mary Pat Kraemer

Also Attending-

Christina Houston, Deputy Designated Federal Officer (DDFO)

Gaeton Falance, Federal Coordinator

Guests in Attendance-

1. Bob Gilkeson, Public
2. H. L. Jody Plum, U.S.DOE/CBFO
3. Paul Huber, LANL
4. David Swale, Energy Solutions
5. Colin Austin, Energy Solutions
6. Pajani Joglerar, U.S.EPA/HQ
7. Juan Reyes, EPA/Washington, DC
8. Nick Stone, EPA Region 6
9. Ray Lee, EPA/Washington, DC
10. Chuck Byrum, EPA/Washington, DC
11. Tom Pecke, U.S.EPA/Washington, DC
12. Tom Starke/LANL
13. Roger Liddle, DOE
14. Lorrie Bonds-Lopez, LANS
15. Jose Jerez, Energy Solutions

NNMCAB Staff:

Menice Santistevan, NNMCAB Executive Director
Grace Roybal, NNMCAB Office Administrator
Lorelei Novak, NNMCAB Technical Programs and Outreach
Eddie Roybal, NNMCAB Sound Technician
Rosemary Romero, Independent Facilitator

MEETING AGENDA:

- I. Call to Order- Christina Houston, DDFO.
- II. Establishment of Quorum:
 - *Roll Call.*
 - *Excused Absences.*
- III. Welcome and Introductions- Rosemary Romero.
- IV. Approval of Agenda.
- V. Approval of Minutes of July 25th, 2007.
- VI. Election of Officers Report from 2008 Nominating Committee.
- VII. Board Business / Reports:
 - *Report from Chair J. D. Campbell*
 - *Report from DOE Christina Houston*
 - *Report from Executive Director Menice Santistevan*
- VIII. Old Business
- IX. New Business.
- X. Committee Reports:
 - *Environmental Monitoring, Surveillance and Remediation Committee- Introduction of Recommendation 2007-03*
 - *Introduction of Recommendation 2007-04.*
 - *Waste Management Committee Update on Spring NNM CAB Sponsored Forum.*
 - *Committee Business: Approval of Final 2008 Committee Work Plans.*
- XI. Report from Liaison Members and Comment on Proposed CAB Recommendations:
 - *EPA- Rich Mayer*
 - *DOE- George Rael*
 - *LANS- Sue Stiger*
 - *NMED- James Bearzi*
- XII. Public Comment Period
- XIII. Consideration and Action on Recommendation 2007-03.
- XIV. Consideration and Action on Recommendation 2007-04.
- XV. Presentation on Quarterly Performance Reports on Environmental Programs at LANL from George Rael.
- XVI. Presentation on Proposed Responses to the 17 National Academies of Sciences' Recommendations Regarding Groundwater Monitoring Issues at Los Alamos National Laboratory- George Rael and Sue Stiger.

XVII. Round Robin: Each member gives input on the Board Meeting and Presentation Board Members.

XVIII. Recap of Meeting: Issuance of Press Releases, Editorials, etc.

XIX. Adjournment- Christina Houston, DDFO.

MEETING MINUTES:

I. Call to Order Christina Houston, DDFO.

The regular bi-monthly meeting of the Northern New Mexico Citizens' Advisory Board (NNMCAB or CAB) meeting was held on September 19, 2007 at Santa Fe Community College in Santa Fe, New Mexico. The Chair, J. D. Campbell presided. Rosemary Romero served as the facilitator for the meeting. Christina A. Houston, Deputy Designated Federal Officer (DDFO), stated that on behalf of the Department of Energy (DOE), the regular bi-monthly meeting of the NNMCAB was called to order at 2:00p.m. The regular meeting of the NNMCAB was open to the public and posted in the Federal Register in accordance with The Federal Advisory Committee Act.

II. Establishment of Quorum.

Roll Call- 12 members present.

Excused Absence- David Church, Mary Pat Kraemer.

Ms. Houston, Deputy Designated Federal Official (DDFO) from the Department of Energy (DOE), declared a quorum with twelve members present at the start of the meeting. David Church, NNMCAB Member, was granted an excused absence for the meeting.

III. Welcome and Introductions.

Ms. Houston introduced Rosemary Romero, of Romero Consulting, who was the facilitator for the meeting. Ms. Houston stated that she was excited to see so many new CAB nominees in attendance. She also thanked the veteran CAB members for attending the meeting. She introduced Mr. Gaeton Falance, DOE, as the Federal Coordinator who supported Ms. Houston with her duties as DDFO for the NNMCAB.

Ms. Romero asked for introductions from the group at the main table, which included many new CAB member nominees, CAB members, CAB staff, and liaison members. Ms. Romero announced that there was a public comment period scheduled at 6:00p.m.

IV. Approval of Agenda.

The Board reviewed the agenda. Ms. Romero asked for a motion to approve the agenda as presented. Dr. Berting made a motion to approve the September 19, 2007 meeting agenda. Mr. Gallegos seconded the motion. The agenda was approved.

V. Approval of Minutes of July 25, 2007.

Ms. Romero asked for a motion to approve the July 25, 2007 CAB Meeting minutes. Dr. Campbell made a motion to approve the July 25, 2007 minutes with minor editorial changes noted from Dr. Berting. Mr. Phelps seconded the motion. The minutes were approved.

VI. Election of Officers for Fiscal Year 2008. Slate presented by Nominating Committee.

Slate:

September 2007 NNM CAB Officer Elections.
Slate:

Nominations for Chair:

J.D. Campbell

Larry Rapagnani (NOMINATION WITHDRAWN)

Nominations for Vice Chair:

Fran Berting to May 2008, at which time her term ends.

Mary Pat Kraemer to May 2008, at which time her term ends.

Robert Gallegos (NOMINATION WITHDRAWN)

Ralph Phelps

Mr. Rapagnani, Chair of Nominating Committee for the Election of Officers, 2008 provided the Board with the updated slate with modifications noted since the July 2007 CAB Meeting (see above chart.) Printed ballots were handed out to all CAB members present. Ms. Novak counted the ballots and Ms. Houston announced that Dr. Campbell was elected NNM CAB Chair and Dr. Berting was elected Vice Chair through the completion of her term in May of 2008.

VII. Board Business / Reports.

a) Report from Chair J.D. Campbell.

 [View written report online](#)

Dr. Campbell reported on the activities of the Chair since the Last Board Meeting on July 25, 2007. His report and meeting discussion are summarized below:

Dr. Campbell chaired Executive Committee meetings on August 22, 2007 and September 5, 2007.

- Developed Agenda for meeting with George Rael & Susan Stiger August 27, 2007.
- Confirmed Date for MDA-G Forum-- Wednesday, April 16, 2008
- DDFO authorized 2 Executive Committee members to attend Intergovernmental meeting in Salt Lake City-- October 16-18, 2007.
- Approved Agenda for September 19, 2007 Board meeting.

- 1 ➤ Considered DOE responses to CAB Recommendations for 2007.

2
3 Dr. Campbell attended the EMSR and WM Committee meetings held in August and
4 September 2007.

5 Dr. Campbell presented information on NNM CAB status and activities, Top 3 Issues for
6 the NNM CAB and discussed plans for MDA-G public forum in April 2008 to the Environmental
7 Management Advisory Board (EMAB) meeting held in Santa Fe on September 13, 2007.

8 Dr. Campbell attended a meeting with Mat Johansen (DOE), Susan Stiger (LANL).

- 9 ➤ Discussed new Top 3 Issues for NNM CAB and obtained input from Mat regarding
10 limited GW monitoring of impacted screens.
11 ➤ Requested DOE Responses to 14 NNM CAB Recommendations on Baseline Change
12 Proposal.
13 ➤ Proposed meeting with Alice Williams, NNSA, regarding Long-term Stewardship
14 integration with LANL remediation program.
15 ➤ Discussed Recommendation for expert Groundwater Panel for groundwater issues
16 at LANL
17 ➤ FY 08 Budget status - likely continuing resolution for months.
18 ➤ Discussed soil moisture measurements in vadose zone using tensiometers - used
19 at all other DOE facilities except LANL.
20 ➤ Discussed potential organization of Local Governments Group to advise LANL on
21 environmental cleanup.

22 Dr. Campbell attended the 2007 Unsaturated Zone Interest Group Meeting by USGS in
23 Los Alamos August 27-30, 2007 as a participant. Discussed:

- 24 ➤ Opportunity for use of advanced tensiometer at LANL to measure changes in soil
25 moisture potential with Joel Hubbell of Idaho National Lab (INL) - Hubbel
26 reported rapid changes (within weeks) in soil moisture potential (soil capillary
27 suction pressure) at depths of 200 feet after period of increased rainfall at INL.
28 Subsurface conditions described similar to those at MDA-G.
29 ➤ Read paper and heard video presentation by Dr. Bin Gao, University of Florida,
30 showing rapid soil colloid movement in soil moisture capillary zones following
31 small increases in soil moisture. Soil colloids may sorb and transport
32 contaminants including radionuclides.
33 ➤ Observed 42 technical presentations and poster presentations and field trip of
34 LANL unsaturated zone geology during conference.

35 Dr. Campbell participated in Conference Calls:

- 36 ➤ SSAB Chairs Conference Call on July 26, 2007.
37 ➤ SSAB Organizing Committee Call on September 13, 2007 for fall 2007 SSAB
38 meeting in Paducah.

39 Dr. Campbell helped to plan the following activities and events:

- 40 ➤ NNM CAB Public Participation Programs in 2008.
41 ➤ Developed plan for presentation on closure alternatives for MDA G
42 ➤ SSAB Chair's Meeting in Paducah September 26 to 28, 2007.
43 ➤ LANL development of unsaturated zone soil moisture measurement techniques
44 using tensiometer.
45
46

c) Report from Department of Energy Deputy Designated Federal Officer.

Ms. Houston provided a verbal report to the Board. She stated that DOE responses to the CAB's current set of recommendations were completed and will be sent to the Board shortly. Ms. Houston relayed that Mr. Rael has asked the board to take a look at the responses.

d) Report from Executive Director Menice Santistevan.

 [View written report online](#)

Ms. Santistevan provided a written report for the Board. Her report is summarized as follows:

Board Membership:

Recruitment efforts over the summer have been successful! We have doubled the membership of the Board and now have 15 members and 14 nominees. Headquarters has approved this number because some members' terms will expire in April. Since appointment is such an involved process, Melissa Nielson has limited the number of nomination packets to be forwarded to Headquarters twice a year. She has approved this number of Board Members through April 2008. The packet must be completed and forwarded through DOE to the Site Manager for signature and then to Dr. Inez Triay, DOE EM Chief Operating Officer.

Executive Committee Meetings:

The Committee met on August 22, 2007 and on September 5, 2007. The committee heard reports from the Chair, Committee Chairs, DDFO and the Executive Director. The committee finalized the agenda for this meeting and reviewed the agenda for the fall EMAB Meeting. The committee also discussed recruitment, draft recommendations, the 2008 NNM CAB Retreat. The committee chairs reported on progress in completing '07 Work Plans and on planning the '08 Work Plans. Executive Committee met with Mat Johansen and Susan Stiger in Los Alamos on August 29, 2007. The committee also discussed the CAB's role in planning a public forum or other public outreach effort regarding closure alternatives for Material Disposal Area G.

Office Management:

The staff supported all committee and board meetings with preparation of notices, agendas and committee and board minutes. Ms. Novak updated the NNM CAB public web site and the CAB member's site. The member site has the capacity for members to conduct research, view documents and write recommendations more efficiently. She stated that Ms. Novak did an outstanding job and the staff hoped the members would take advantage of all of the information that was available on this site. The Summer Newsletter was presently being reviewed by the DDFO.

SSAB Chairs' Meeting:

The fall SSAB Chairs' meeting will be hosted by the Paducah CAB on September 26 and 27, 2007. J. D. Campbell, Fran Berting, Lorelei Novak and Menice Santistevan planned to attend.

Fall EMAB Meeting:

The Environmental Management Advisory Board toured WIPP on September 10, 2007 and held its fall meeting in Santa Fe on September 13 and toured LANL on September 14. J.D. Campbell gave a presentation on NNM CAB issues and George Rael gave a presentation on LANL clean-up. The ATA staff served as staff support for this meeting. It was estimated that

ATA Services Staff spent a combined total of 110 hours planning, organizing and staffing this meeting.

Next Board Meeting:

Ms. Santistevan announced that the next Board meeting will be held on November 28th, 2007 at the Santa Fe Community College, Jemez Rooms.

VIII. Old Business.

There was no old business brought up by the membership during this segment.






IX. Committee Reports.

➤ **Environmental Monitoring, Surveillance and Remediation Committee Report.**

 [View written report online](#)





Ms. Henline acted as the reporting member for the EMSR Committee. She reported on the activities of the committee since the last CAB meeting.

August 22, 2007 EMSR meeting:

-  Reviewed and approved the assessment of EMSR accomplishments so far in FY07.
-  Reviewed the FY'08 Work Plan and added an item to follow up in the Recommendations of the National Academies of Sciences Report, "Plans and Practices for Groundwater Protection at the Los Alamos National Laboratory," Final Report 2007.
-  Reviewed the Top Three CAB issues to be presented at Paducah SSAB.
-  Reviewed draft Recommendation 2007-03 concerning formation of a Groundwater Panel.
-  Short discussion of the Executive Summary section of the latest Environment Surveillance Report. Members tasked to read the 25 pages of the Executive Summary and give feedback to Lorrie Bonds Lopez, LANL Environmental Programs. The committee members provided comments during the following week.

September 5, 2007 EMSR meeting:

This was a joint meeting of the EMSR and Waste Management Committees.

-  Approved EMSR FY'08 Work Plan.
-  Elected Committee officers: Pam Henline, Chair, Terry Boyle, Vice Chair.
-  Discussed changes in FY'08 Work Plan and committee members approved work plan.
-  Jean Dewart, LANL, presented information about Watershed Integration. Ms. Dewart's PowerPoint presentation was numbered, "LA-UR-07-6010."

➤ **Introduction of Draft Recommendation 2007-03, "Groundwater Panel for LANL."**

Ms. Henline introduced draft Recommendation 2007-03 authored by the EMSR Committee. Draft 2007-03 recommended:

1. The DOE retain a Groundwater Panel for LANL consisting of national experts in multiple disciplines including geology, hydrogeology, engineering, geochemistry, analytical modeling, and groundwater policy issues to assist and advise the LANL groundwater team.

2. The DOE retain a Groundwater Panel for LANL throughout the implementation of the Consent Order to periodically provide assistance and advice to the LANL groundwater team.
3. The DOE seek the advice of the Groundwater Panel to add new or additional members with specialized expertise to the Groundwater Panel as issues or needs develop over time.

The members and nominees discussed the draft recommendation, which was paraphrased below.

- *Concept is good but recommendation should be extremely carefully worded. Panel should aid and not hinder LANL i.e.: have value added - Ralph Phelps*
- *Suggestion to defer discussion until the Board heard from NMED and wanted to hear how the Lab planned to respond to the National Academies of Sciences (NAS) Report "Plans and Practices for Groundwater Protection at the Los Alamos National Laboratory," (2007). Also, suggested it would be better to state our concerns about the deficiencies of the LANL program and monitor to see if LANL decided to develop their own panel or not.- Larry Rapagnani*
- *The main point of this recommendation was to get additional independent expertise for LANL. There was a need for this panel; the Lab does need additional expertise. Referenced the 17 recommendations listed in the NAS Report, which referenced the need for more independent peer review of the program.- J. D. Campbell*
- *This recommendation did not state that LANL was not doing good work, but as for any 'high level endeavor' such as major groundwater monitoring program extra help may be needed to fill the gaps.- Fran Berting*
- *The panel should report to "something higher"—could publish recommendations to the Los Alamos Site Office of the DOE and publicly publish as well.- Terry Boyle*
- *The LANL employees are not separated from the outside world. They have consulted with other experts and published in scientific journals.- Gerry Maestas*
- *As a group this Board must stand together. If one has a job at stake you will defend it—therefore, we must all stand by the words in the recommendations. The Board was here to take the public's interest at heart.- Barbara Gonzales*

☞ Motion:

In support of getting the recommended panel's findings publicly available, Dr. Berting made a motion that the Board consider incorporating an additional recommendation into the text of draft 2007-03 with the following wording:

"#4. In an effort to improve public understanding and confidence in the groundwater monitoring program at LANL, the NNM CAB recommends that the Groundwater Panel make some of its meetings open to the public and all its comments open to the public."

☞ Second:

Dr. Berting's motion was seconded by Ms. Henline.

☞ All in favor:

The motion passed. Draft Recommendation 2007-03, "Groundwater Panel for LANL" would be taken up for final consideration and action later in the agenda.

- **Introduction of Draft Recommendation 2007-04, "Quantify Vadose Zone Soil Water Potential Changes and Evaluate Colloidal Particle Transport Beneath Waste Facilities at LANL"**

Ms. Henline introduced draft Recommendation 2007-04 authored by the EMSR Committee. Draft 2007-04 recommended:

1. The DOE work with Joel Hubbell of INL to consider installation of advanced tensiometers in the vadose zone at LANL to study changes soil water potential at depth.
2. The DOE evaluate changes in soil water potential at depth and the potential for migration of contaminants with these changes in soil moisture.
3. The DOE consider and evaluate the potential fate and transport of contaminants attached to soil colloids moving throughout the vadose zone beneath waste facilities at LANL.

Ms. Henline described draft 2007-04 as a very technical recommendation that suggested the use of a device that measured soil moisture in capillary fringe zones called a tensiometer. However, the overall of the recommendation was to ensure that effective, efficient and reliable programs were implemented at LANL to monitor changes in soil moisture and the potential for migration of contaminants in the vadose zone beneath waste facilities at LANL. Dr. Berting's editorial changes were noted.

Draft Recommendation 2007-04, "Quantify Vadose Zone Soil Water Potential Changes and Evaluate Colloidal Particle Transport beneath Waste Facilities at LANL" would be taken up for final consideration and action later in the agenda.

➤ **Waste Management Committee Report.**

Mr. Phelps, WM Committee Chair, acted as the reporting member for the WM Committee. Mr. Phelps explained to the new nominees that the EMSR Committee worked on "where the waste products go where we can't see" and the WM Committee worked on "where the waste goes that we can see." He asked the nominees to consider what committee they might want to serve on, and to look at the public and member websites for more information about the Board. Mr. Phelps explained that there is an overlapping interest in both committees with valuable information for both groups that was often presented at joint meetings.

➤ **Update on Spring 2008 NNM CAB Sponsored Forum.**

The WM Committee has started to focus on a public forum to inform the public on the closure alternatives for Material Disposal Area (MDA) G at LANL. The planning of this forum was to be under the guidance of the WM Committee and represented a major part of their 2008 Work Plan objectives. The date for the forum has been set for April 16, 2008. The target time period was scheduled for an evening forum with a poster session to be held sometime between 5:00 and 8:00 p.m. The location has been reserved for the forum to be held at the Santa Fe Community College, which was the same location for the Board's previous forum on Area G held in May of 2005. Mr. Phelps described arranging a simulcast of the forum for television and a possible webcast. The planning for the forum was to be the major activity for the WM Committee through the next fiscal year.

➤ **Committee Business: Approval of Final FY '08 Committee Work Plans**

☞ **Motion:**

Dr. Campbell moved that the Board accept the committee Work Plans and submit to DOE.

☞ **Second:**

Dr. Rapagnani seconded the motion.

☞ **All in Favor:**

The motion was approved and the final technical committees Work Plans for 2008 were to be forwarded to the DOE for approval.

I. Report from Liaison Members.

Liaison members from DOE, EPA, LANL and NMED provided comments to the Board. Their comments are summarized as follows:

➤ Rich Mayer, EPA:

Mr. Mayer reported to the Board as the NNM CAB Liaison member for EPA Region VI. Prior to his report, Mr. Mayer noted that he did not see a problem with the 2007-03 draft recommendation. He thought the idea of a groundwater panel could be put to good use. But he thought it shouldn't be set in stone that LANL has to follow the recommendations.

Mr. Mayer's report covered three major issues, which are summarized as follows:

1. Solid Waste Management Unit (SWMU) Storm water Permit: LANL will submit an application to EPA regarding the approximately 1300 SWMUs located at the Lab that will fall under the permit. The LANL has as many SWMUs as any in the country and there are many to review, may possibly cause each site to be monitored either individually or in groups. He recommended that this process could be something that CAB may want to look at.
2. EPA issued a final industrial waste permit for LANL, which was a discharge permit regarding liquid waste. Mr. Mayer stated that the Lab was allowed to discharge liquid waste but they must limit the amount discharged. He stated that NMED added the condition to make the Polychlorinated Biphenyls (PCB) measuring much more sensitive; a condition that was added by LANL after objecting initially. Mr. Mayer explained that there were approximately 16 outfalls in the permit. * More information on PCBs can be found [online](#) at the EPA website.
3. EPA received a request from Concerned Citizens for Nuclear Safety (CCNS) to use some contractor/ sampling money reserved for federal facilities to sample the production and drinking water wells around Santa Fe for radionuclids.

Question and Answer:

Q- Larry Rapagnani: For permits issued- how has EPA monitored that LANL was implementing the permit properly? How did EPA follow up?

A- Rich Mayer: LANL was supposed to submit monthly reports to EPA. Also, EPA did periodic sampling of the outfalls.

Q- J.D. Campbell: What about the cost for the sophisticated trace level sampling project near the Rio Grande?

A- Rich Mayer: EPA completed some preliminary cost analysis. But he explained that sampling would cost upwards of \$300,000, which would mean they could do some sampling but not all.

➤ James Bearzi, NMED:

Mr. Bearzi introduced guest attending from EPA headquarters. Mr. Bearzi gave a subject matter presentation to the Board entitled, "What Shall the CAB look for in the RCRA Permit?" He provided handouts to the Board. He reviewed the details of the hazardous waste permit, which will be put out for public comment for a 60 day period and he suggested that the CAB could help by taking a look at the permit and providing its comments.

The draft RCRA Permit covered:

1. Regulation of hazardous waste management.
2. Included mixed waste.
3. Permitted hazardous waste management units.
4. Organized clean-up activities.
5. Provided remedy for noncompliance.
6. Included public participation opportunities.

Specifically covered in the RCRA Permit for LANL:

1. Hazardous waste generation.
2. Hazardous waste storage.
3. Hazardous waste treatment.
4. Past disposal.
5. Mixed waste.
6. Corrective Action.
7. Public Participation.

Mr. Bearzi described the definition of hazardous waste:

- Waste that has toxicity characteristics that EPA has determined to be harmful or industrial processes that we know to be hazardous.

Mr. Bearzi stated that, included in this permit, the Lab would have to close old disposal sites. Mr. Bearzi informed the Board that the areas that were subject to the permit are the Material Disposal Areas including G, H, and L. Mr. Bearzi discussed the remedy selection process and closure plan process outlined in the Order on Consent. He also stated that there would be opportunity for the public to comment on the draft permit.

Question and Answer:

Q- Pam Henline: What time period does the permit cover?

A- James Bearzi: Ten years.

Q- J.D. Campbell: Asked Mr. Bearzi to comment on draft Recommendation 2007-03.

A- James Bearzi: Mr. Bearzi referred to the NAS Report's recommendation to get more outside peer review. He agreed that LANL could benefit from more peer review. He stated that NMED supported the Board's recommendation, but NMED was not 'okay' with LANL getting no peer review at all. He qualified NMED's support of the recommendation by stating that the panel's recommendations needed to be independent and autonomous. The groundwater panel needed a way to issue recommendations formally through a set of bylaws. The Lab should be free to take the advice or not, but LANL would have to justify why it might support or deviate from a scientific panel, because sometimes there were legal, regulatory reasons that factor into decision making. Mr. Bearzi also briefly discussed draft Recommendation 2007-04. He did support the tensiometer, especially if a tensiometer could provide decent field data. However, he thought it might be likely that the tensiometers might not be put in the right locations and he cautioned that LANL needed to be cautious where they located the instrument and how they used the data.

➤ **Sue Stiger, LANS and George Rael, DOE:**

Due to the discussion running a bit over, George Rael, DOE, Sue Stiger, LANS, held their comments to be combined with time allotted for their presentations after the dinner break.

II. Public Comment Period.

Public introductions were made, but no one signed up for public comment.

III. Consideration and Action on Recommendation 2007-03 (Approved).

✎ Motion:

Dr. Campbell moved that the Board accept the addition of recommendation #4 to the text of the draft recommendation and vote for approval and submission to the DOE. (Dr. Campbell read recommendation # 4 to the Board).

✎ Second:

Mr. Loya seconded the motion.

✎ All in Favor:

The motion passed. Recommendation 2007-03 was approved for submission to the DOE.

Regarding Recommendation 2007-03- Options considered and substitute motions that were later voted down or withdrawn:

1. Dr. Berting made a substitute motion to withdraw the addition of recommendation #4. Ms. Crutchfield seconded the motion. Dr. Berting later withdrew the motion prior to a vote.
2. Following the suggestion by the DDFO, Dr. Berting put forth a substitute motion to table consideration and action on this recommendation until a future meeting. Ms. Crutchfield seconded the motion. The motion did not pass.
3. Considered returning the recommendation to the committee level. Motion did not pass.

Discussion that lead to the approved motion above:

- *The expert panel should report to someone at LANL or higher up, willing to concede if the recommendations went directly to the public or had a way to get LANL to confront the recommendations.- Terry Boyle*
- *Dialog created with peer review was an interesting dialog between reviewers and researchers, which seemed to be a necessary aspect for a successful program. Was there any way to encourage LANL to get more peer review other than to formally recommend?- Kathleen Hall*
- *Language was carefully considered to not to be advisory.- J.D. Campbell*
- *The recommendation would open up the program to the 'professional critics.' Not in favor of the recommendation, however, he thought he could live with it.- Gerry Maestas*
- *Having watched this process for a few years, there was always some type of adversarial point of view, those folks may not be on this panel and sometimes the adversarial issues brought out good things and recognition happened. She doesn't think the 'professional critic' element described by Mr. Maestas would be a bad thing.- Pam Henline*
- *When we are dealing with a public agency then the public simply must be involved. We may not like all the things that are said, but we must take their views into account.- Don Dayton*
- *This would be a group comprised of highly technical people talking about very technical issues. The public doesn't need to be in every meeting, but they could be brought in to the report at the draft stage.- Fran Berting*
- *We have mixed apples and oranges—she thought the independence of the panel was very important to fulfill the goal of independent peer review. The question is does the recommendation stand as it was written or would the addition of recommendation number four improve or enhance the purpose.- Eva Artschwager*

- *He didn't want to exclude the public, in response to Mr. Dayton but he doesn't often see many of the actual public at the meetings—this panel will come up with recommendations which most likely would end up in the newspaper or other media.- Gerry Maestas*
- *Discussed bylaws and the minority report option; the Board has had only one instance in 8 years where a minority report was issued. If no amendment was agreeable then a minority would be needed. The place to work on the recommendations was in the committee setting. It was incumbent upon us as Board members to come to a consensus. The word-smithing, etc. was best suited at the committee level- J.D. Campbell*
- *People were trying to make this too fixed—our idea was to have a panel, with experts; a group of people that would get together and talk about options. This recommendation was carefully worded.- Pam Henline*
- *There seemed to be enough concern that the recommendation needed to go back to the committee. Consider taking this recommendation back to the committee level for revision and discussion even if there was a joint meeting called.- Chris Houston*
- *There was nothing that said we needed to vote on this tonight. But a matter of clarification was needed on the matter of consensus. Consensus could be summed up to mean: people that vote for (the recommendation) and the rest of the people 'can live with' (the recommendation) and if you just can't (live with it) then you do a minority report.- Fran Berting*
- *He recognized that peer review works and he endorsed peer review. At a site for uranium tailings, they couldn't get consensus so they had peer review. DOE had peer review for Sandia mixed waste landfill and it worked.- George Rael*
- *Having had a fair amount of experience with broad review and peer review, and what worked best was to have a toolbox that has a few alternatives stored inside as 'one size doesn't always fit all.' She would rather see recommendations that support a range of things that broadened LANL's credibility.- Sue Stiger*

IV. Consideration and Action on Recommendation 2007-04 (Approved).

☞ Motion:

Dr. Campbell made a motion that the Board vote to approve Recommendation 2007-04 with Dr. Berting's edits and one substitute sentence. (Dr. Campbell read the new sentence to the Board).

☞ Second:

Dr. Berting seconded the motion.

☞ All in Favor:

The motion passed. Recommendation 2007-04 was approved for submission to the DOE.

V. Presentation on Quarterly Performance Reports On Environmental Programs at LANL from George Rael

Mr. Rael, Assistant Manager of Environmental Programs at LANL, presented a subject matter report for the Board entitled, LANL Quarterly Project Review, FY07 - 3rd Quarter." The presentation described the schedule for the Environmental Management program clean up of LANL, described via a master summary plan diagram. The clean up project covered soil and water remediation at LANL, defined key project risk and risk mitigation in terms of safety performance and earned value management.

VI. Presentation on Proposed Responses to the 17 National Academies of Sciences' Recommendations Regarding Groundwater Monitoring Issues at Los Alamos National Laboratory from George Rael and Sue Stiger

Ms. Stiger reviewed the current status of LANL's response to the recommendations listed in the NAS Report, Plans and Practices for Groundwater Protection at the Los Alamos National Laboratory, 2007. Ms. Stiger stated that a more comprehensive response to the recommendation was currently in development. The essence of the recommendation and the status of LANL's response are listed in the table below:

NAS Recommendation Number:	Essence	Status
1	Complete the characterization of major disposal sites.	Currently in life-cycle baseline.
2	Develop mass balance estimates.	Completed for some areas, in life-cycle baseline where feasible.
3	Quantify inventories of contaminants released in canyons; continue to develop surface water and sediment monitoring programs.	Ongoing, continues in life-cycle baseline.
4	Better integrate geochemistry into conceptual modeling.	Proposed additional work in life-cycle baseline, funding-contingent.
5	Review all operations; reduce discharges and releases to the extent possible.	Feasibility study due for completion 12/07; other plans in life-cycle baseline.
6	Add a sitewide perspective to future groundwater monitoring plans.	Ongoing network evaluations inform a sitewide perspective; supplemental geophysics in review.
7	Increase efforts to develop and use quantitative methods to describe contaminant pathways.	Ongoing in network evaluations in current program and will continue through life cycle.
8	Confirm the integrity of the major disposal sites; schedule regular subsurface surveillance.	Ongoing in current program and will continue through life cycle.
9	Continue efforts to characterize regional aquifer.	Proposed additional work in life-cycle baseline, funding-contingent.

10	Increase attention to geochemistry within site characterization context.	Proposed additional work in life-cycle baseline, funding-contingent.
11	Demonstrate better use of understanding of contaminant pathways in design of monitoring program.	Ongoing in current program and will continue through life cycle.
12	Conduct geochemical research on interaction of contaminants, drilling fluids, and geologic media.	Proposed additional work in life-cycle baseline, funding-contingent.
13	Conduct future characterization drilling and monitoring as separate tasks.	In current strategy; precedent already set with chromium investigation.
14	New monitoring wells: single-screen, drill without fluids, careful design for length and depth of well screen.	Precedent successfully set with R-35; plan to continue this approach where feasible.
15	Ensure consistency and clarity of related sampling and analytical procedures.	Ongoing in current program and will continue through life cycle.
16	Ensure measurements near detection limits are sound and are reported appropriately.	Mutual agreement (LANL/DOE/NMED) on reporting in DOE Orders, Consent Order, and NMED-approved workplans.
17	Continue to track wells to improve statistical basis for reporting increases above background.	Ongoing in current program and will continue through life cycle.

VII. Round Robin.

Each member gave input on the Board Meeting.

VIII. Recap of Meeting: Issuance of Press Releases, Editorials, etc.

- Ms. Romero provided the group with a summary of the meeting:
- Thanked the new nominees for attending.

- Gave congratulations to Dr. Campbell and Dr. Berting on their election to Chair and Vice Chair respectively.
- Announced the approval of Recommendations 2007-03 and 2007-04.
- Announced the approval of the technical committee's final 2008 work plans.
- Announced the LANL tour date was set for Nov 6, 2007.

IX. Adjournment Christina Houston

Ms. Houston called for the new nominees to make their committee choice as soon as possible and Ms. Santistevan planned to call the nominees to get their decision.

With no further business to discuss, Ms. Houston, DDFO, adjourned the meeting at 8:30p.m.

Respectfully submitted,




J. D. Campbell, Ph.D., P. E., Chair, NNM CAB

**Minutes prepared by Lorelei Novak, NNM CAB Technical Programs and Outreach*

Attachments:

1. Draft Recommendations [2007-03](#), [2007-04](#).
 2. Printed Comments from member website on Draft Recommendations 2007-03, 2007-04.
 3. [Report](#) from Menice Santistevan, Executive Director.
 4. [Report](#) from J.D. Campbell, Chair, NNM CAB.
 5. [Report](#) from Pam Henline, Chair, EMSR Committee.
 6. [Final FY'2008 EMSR Committee Work Plan](#).
 7. [Final FY 2008 WM Committee Work Plan](#).
 8. DOE/EM/LASO/LANL Quarterly Project Review Presentation Handout, VL-LANL-0030.
 9. EM Program Overview Handout from 9-13-07 Presentation to EMAB in Santa Fe.
 10. J.D. Campbell [9-13-07 NNM CAB Presentation](#) to EMAB in Santa Fe.
 11. James Bearzi, NMED Liaison Member Presentation, "What Shall the CAB Look for in the RCRA Permit, 9-19-07."
 12. National Academies of Sciences Report, "[Plans and Practices for Groundwater Protection at the Los Alamos National Laboratory](#)," Final Report 2007.
-

Public Notice:

 ***All NNM CAB meetings are recorded in accordance with the Federal Advisory Committee Act. Audiotapes have been placed on file at the NNM CAB Office, 1660 Old Pecos Trail, Suite B, Santa Fe, New Mexico, 87505.**

 ***Reference documents listed in the Appendix section of these minutes can be requested for review at the CAB office in Santa Fe.**

***For more information regarding audio transcription or any information referenced to or contained herein these minutes, please call the CAB office at (505)-989-1662.**

FINAL