



Northern New Mexico Citizens' Advisory Board Meeting

November 19, 2008

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

Santa Fe Community College

Santa Fe, New Mexico

MINUTES

In Attendance:

NNMCAB Members-

1. J.D Campbell, NNM CAB Chair
2. Ralph Phelps, NNM CAB Vice Chair
3. Mike Loya, EMSR Committee Chair
4. Gerry Maestas, WM Committee Chair
5. Peter Baston
6. Donald Dayton
7. Robert Gallegos
8. Jane Gaziano
9. George Heindel
10. Ken LaGattuta
11. Lawrence Longacre
12. Antonio Lopez
13. Caroline Mason
14. Patricia Medvick
15. Karen Torres

Excused Absences-

1. Joseph Mark Chavarria
2. Kathleen Hall
3. Pam Henline, EMSR Committee Vice Chair
4. Kyo Kim
5. Robert Villarreal

NNMCAB Staff-

Menice Santistevan, Executive Director
Lorelei Novak, Technical Programs and Outreach
Grace Roybal, Office Administrator
Edward Roybal, Sound Technician

Also in Attendance-

Cate Brennan, Designated Federal Officer (DFO)
Jeffrey Casalina, Deputy Designated Federal Officer (DDFO)
George Rael, DOE/LASO
Rich Mayer, EPA
James Bearzi, NMED
Michael Graham, LANS

Guests in Attendance-

1. Robert A. Rotuno, Public
2. Paul Huber, LANS
3. Lorrie Bonds-Lopez, LANS
4. Floyd E. Archuleta, Portage, Inc.
5. Robert Gilkeson, Public
6. Debora Shaw, Public
7. Anita Reiser, Public
8. Terry Morgan, LANS
9. Danny Katzman, LANS
10. Craig Eberhart, LANS
11. Michael McNaughton, LANS
12. Phil Fresquez, LANS
13. Tom Starke, LANS
14. Tom Pallegos, Public
15. Cheryl Etsitty, DOE/NNSA/LASO
16. Tatiana Etsitty, Public
17. Michelle Etsitty, Public
18. Roger Snodgrass, Los Alamos Monitor
19. Tim Goering, LANS
20. Danny Peterson, Public
21. David Rogers, LANS
22. Steve Reneau, LANS
23. Chris Echohawk, LANS
24. Ardyth Simmons, LANS
25. Andrew Green, LANS

MEETING AGENDA:

- I. Call to Order- Jeffrey Casalina, DDFO.
- II. Establishment of Quorum- (11 needed)
 - a. Roll Call- 15 members
 - b. Excused Absence- Joseph Mark Chavarria, Pam Henline, Kyo Kim, Robert Villarreal, Kathleen Hall
- III. Welcome and Introductions.
 - Introduction of Catherine Brennan, Designated Federal Officer
 - Introduction of Michael Graham, Environmental Programs Director (LANS)
- IV. Approval of Agenda.
- V. Approval of Minutes of September 24, 2008.
- VI. Old Business.
 - a. Written Reports
 - b. Open Discussion from Board Members
- VII. Consideration and Action on Recommendations to the DOE

- 1 – Recommendation 2008-10, Regarding Independent Review of the
 - 2 MDA G Corrective Measures Evaluation Report by DOE, Office of
 - 3 Groundwater and Soil Remediation (Approved for Submission to
 - 4 DOE)
 - 5 – Recommendation 2008-11, Reducing the Outfall into Sandia
 - 6 Canyon, Relating to Studies and Cleanup of Chromium (Approved
 - 7 for Submission to DOE)
 - 8 VIII. Remarks from Michael Graham, LANS
 - 9 IX. Update on Consent Order (NMED) James Bearzi
 - 10 X. Update from EPA (Region 6) Rich Mayer
 - 11 XI. Remarks from George Rael, DOE
 - 12 XII. Public Comment Period.
 - 13 XIII. Presentation on LANL Environmental Surveillance Report
 - 14 LANL Subject Matter Expert (SME) Presenters:
 - 15 – Terry Morgan: Overview and Compliance Status
 - 16 – Andrew Green: Air Surveillance
 - 17 – David Rogers: Groundwater Monitoring
 - 18 – Steve Reneau: Watershed Monitoring
 - 19 – Phil Fresquez: Soil, Foodstuffs and Biota Monitoring
 - 20 – Michael McNaughton: Rad and Non-Rad Dose Assessment
 - 21 XIV. Open Discussion from Board Members
 - 22 a. Press Releases, Editorials, etc.
 - 23 b. Future Presentation Topics
 - 24 c. Other items.
 - 25 XV. Adjournment- Jeffrey Casalina, DDFO.
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MEETING MINUTES:

I. Call to Order.

The regular bi-monthly meeting of the Northern New Mexico Citizens' Advisory Board (NNMCAB or CAB) meeting was held on November 19, 2008 at the Santa Fe Community College, Santa Fe, New Mexico. The Chair, J. D. Campbell presided. Jeffrey Casalina, Deputy Designated Federal Officer (DDFO) stated that on behalf of the Department of Energy (DOE), the regular bi-monthly meeting of the NNM CAB was called to order at 2:00 p.m. The regular meeting of the NNM CAB 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- 15 members present.

Ms. Novak conducted roll call and announced a quorum with 15 members present at the meeting. Mr. Casalina had previously approved excused absences for Joseph Mark Chavarria, Kathleen Hall, Pam Henline, Kyo Kim and Robert Villarreal.

III. Welcome and Introductions.

Mr. Casalina opened the meeting with remarks. He introduced Cate Brennan, incoming DOE Designated Federal Officer, to the Board. Ms. Brennan replaced retiring DFO, Mr. Doug Frost. Ms. Brennan stated she was happy to be at the meeting and to meet the Board members. She looked forward to getting to know them and hear their concerns and issues.

Mr. Casalina reviewed CAB administrative policies including cell phone use and tent card procedures. He stated members would be recognized in order when making comments or asking questions. He asked the members to use the microphones when speaking.

Members new and old gave brief introductions to the group in a brief round robin, including staff and Liaison members, each including some background information.

Mr. Casalina also introduced Michael Graham, LANS Environmental Programs Director.

Dr. Campbell thanked outgoing DFFO, Ms. Christina Houston, for her service and support to the CAB. Ms. Houston was presented with a gift of appreciation from the CAB.

IV. Approval of Agenda.

The Board reviewed the agenda. The following changes or announcements regarding the agenda were made:

- Notation for minutes: written reports were included in the mailed meeting packets. To save time, the reports were not being given verbally; specific questions could be brought up in new business.
- Board discussion on upcoming report to DOE regarding CAB past year activities.
- Dr. Campbell to discuss CAB letter to the New Mexico Environment Department (NMED) regarding Material Disposal Area-G (MDA-G.)

Action: Dr. Campbell asked for a motion to approve the agenda, as amended. Mr. Phelps made a motion to approve the November 19, 2008 meeting agenda, as amended. Mr. Loya seconded the motion. The amended agenda was approved.

V. Review of Minutes from September 24, 2008.

The Board reviewed the minutes from the September 24, 2008 CAB meeting. By previous instruction from DOE Headquarters, the minutes were reviewed and certified by the NNM CAB Chair. Mr. Longacre stated he wanted the minutes of the meetings to be detailed and inclusive. Dr. Campbell stated that he and Mr. Casalina, DDFO, had directed Ms. Novak to keep the minutes brief and succinct, to include actions and summarize discussions as directed in Robert's Rules of Order.

VI. Old Business.

- a. Written reports from the Chair, Executive Director of the Board, and the EMSR and WM Committee Chairs were submitted. The reports were included as paper copy in the Board meeting packets.

– Report from Chair, J.D. Campbell:

☞ [View Chair's written report online](#)

A printed copy of Dr. Campbell's report can be requested from the CAB office at (505) 989-1662 or [via email](#). Dr. Campbell reviewed his written report for the Board and answered questions from the Board members.

– Report from Executive Director, Menice Santistevan:

☞ [View Executive Director's written report online](#)

A printed copy of Ms. Santistevan's report can be requested from the CAB office at (505) 989-1662 or [via email](#). Ms. Santistevan briefly highlighted the major points of her report for the Board. She announced the next Board meeting was scheduled for 28 January 2009 at the Holiday Inn.

– Waste Management Committee Report:

☞ [View WM Committee Chair's report online](#)

Mr. Phelps, WM Committee Chair, acted as the reporting member for the WM Committee. A printed copy of Mr. Phelps report can be requested from the CAB office at (505) 989-1662 or [via email](#).

– Environmental Monitoring, Surveillance and Remediation Committee Report.

☞ [View EMSR Committee Chair's written report online](#)

1 Mr. Loya acted as the reporting member for the EMSR Committee. A printed copy of
2 Mr. Loya's report can be requested from the CAB office at (505) 989-1662 [or via email.](#)

3
4 **b. Open Discussion from Board Members**

5 The Board held an open discussion.

6
7 **Topic: CAB Self Evaluation for DOE**

8 Mr. Phelps discussed the status of the CAB's Annual Evaluation Report, which was based
9 on the CAB's Internal Survey results and the Board's activities during the past year. Mr.
10 Phelps asked the membership to review the draft report. The report needed to be finalized
11 by the end of December 2008. The Chair planned to use the Emergency Polling Procedures to
12 get Board majority approval by December 17, 2008. The Emergency Polling Procedure will be
13 used because the approval for the Report is needed before the next full Board meeting,
14 scheduled for January 28, 2009.

15
16 **Topic: Board review of CAB letter to Mr. Donald Winchell, Jr., Manager Los Alamos Site
17 Office, regarding NNM CAB Recommendations, DOE Responses and NNM CAB Requests**

18 Dr. Campbell presented a copy of the letter addressed to Mr. Winchell, which was
19 approved by the Executive Committee. He offered the letter to the Board for review. The
20 letter provided Mr. Winchell a list of recommendations and requests to the DOE Los Alamos
21 Site Office (LASO regarding the clean up and closure of MDA-G, and additionally, "what should
22 be done to ensure the safe long-term care of MDA G Los Alamos National Laboratory (LANL)."
23

24 **Topic: January 2009 Meeting Schedule**

25 Dr. Campbell announced the schedule of meetings for January 2009. The Executive
26 Committee meeting was scheduled for January 14th from 11:00 a.m. to 1:30 p.m. The two
27 technical committees (EMSR and WM) planned to hold a combined meeting on also on January
28 14th from 2:00 p.m. to 5:00 p.m. The next CAB meeting was scheduled on January 28th.

29 Topics under consideration for discussion and presentations were announced:

- 30 ○ Groundwater site wide investigation and data quality objectives for new wells at
31 LANL.
 - 32 ○ Presentation on CAB recommendations from George Rael and Jeff Casalina.
- 33

34 **Topic: New Member Tour at LANL**

35 Mr. Baston attended the November 18, 2009 new member tour of LANL. He thanked
36 Ms. Bonds-Lopez for an informative tour. He had asked the air quality presenters at the tour
37 about the environment of measuring pollutions and whether they are static? Dr. Campbell
38 stated that the presentation on the LANL Environmental Surveillance Report would address
39 Mr. Baston's question. If not addressed, the CAB can make a formal request for further
40 information. Mr. Rich Mayer, EPA Liaison member of the CAB, stated that LANL and NMED
41 have taken many types of background samples of surface water, snowmelt, rain events. He
42 suggested asking one of the presenters, Mr. McNaughton, LANS, directly.

43
44 **Topic: Minutes**

45 Mr. Phelps said minutes are an important part of the CAB's public output and he
46 wanted the members to "stand behind" the minutes. It was suggested members take the

time to review the minutes in advance of the Board meeting. Advance copies of the draft are provided via electronic and print copies to the members so that any corrections and suggestions can be incorporated into the certified minutes.

Mr. LaGattuta mentioned that a newsletter was another avenue besides minutes to provide the public more information about the CAB. Ms. Santistevan stated there was a newsletter in the final stages, which would be ready for distribution after Thanksgiving.

VII. Consideration and Action on Recommendations to the DOE.

The Board took up the business of consideration and action on the following recommendations.

- a. Recommendation 2008-10, Regarding Independent Review of the MDA G Corrective Measures Evaluation Report by DOE, Office of Groundwater and Soil Remediation (Approved for Submission to DOE)
- b. Recommendation 2008-11 Reducing the Outfall into Sandia Canyon, Relating to Studies and Cleanup of Chromium (Approved for Submission to DOE)

a. Recommendation 2008-10- "Regarding Independent Review of the MDA G Corrective Measures Evaluation Report by DOE, Office of Groundwater and Soil Remediation" was drafted by the Environmental Monitoring, Remediation and Surveillance Committee of the NNM CAB.

No. 2008-10 recommended that DOE direct LANL to submit the MDA G Corrective Measures Evaluation Report to DOE Office of Groundwater and Soil Remediation for an independent peer review of the report and a timely schedule for review completion and report issue by DOE should also be established. The intent of this recommendation is to perform an independent and informed review of the MDA G CME, which can be referenced by LANS in its discussions with NMED during the NMED acceptance review. This independent review could also provide information for the NNM CAB in our public communication interfaces explaining the methods of option assessment for MDA G and any relationships to other DOE restoration sites.

Motion: Mr. Loya made a motion to adopt NNM CAB Recommendation 2008-10. Mr. Phelps seconded the motion.

Vote:

Unanimously approved

Action: Recommendation 2008-10 was approved for submission to the DOE.

b. Recommendation 2008-11- "Reducing the Outfall into Sandia Canyon, Relating to Studies and Cleanup of Chromium" was drafted by the Environmental Monitoring, Remediation and Surveillance Committee of the NNM CAB.

No. 2008-11 recommended, as an interim measure, reduce the amount of outfall into Sandia Canyon so that the amount was sufficient to keep the existing wetland area viable, continue to study the effects on stored Cr3 and Cr6 if the wetland is not maintained and

divert the excess of the outfall to beneficial uses. The intent of this recommendation is to eliminate a possible mechanism for spread of Chromium into the aquifer while other studies and remedies are underway.

Motion: Mr. Gallegos made a motion to adopt NNM CAB Recommendation 2008-11 as amended. The amendment included removing references to a specific amount of outfall to be reduced in Sandia Canyon and to include the phrase "as an interim measure." Mr. Dayton seconded the motion.

Vote:
Unanimously approved

Action: Recommendation 2008-11 was approved for submission to the DOE.

VIII. Remarks from Michael Graham, LANS

Mr. Graham joined LANS in October of 2008. Prior to coming to LANS he was at the Savannah River Site (SRS) where he was involved with the Soil Remediation Project. Mr. Graham also worked at the Idaho National Laboratory where worked on closure and the balance of the Idaho clean up. Prior to Idaho, Mr. Graham worked at the Hanford site for four years—concentrating on groundwater issues. His first impressions at the Lab have been the great people who work there and the good support coming from DOE.

What Mr. Graham noticed at LANL since his arrival:

- LANL had a good safety record with zero incidences in the last year.
- Congratulated the Laboratory on getting the last shipment of high activity waste drums to the Waste Isolation Pilot Plant (WIPP).
- He has been watching the current well drilling efforts going on at the LAB.
- He has spoken to Mr. Huber, LANS, about the recent high-level samples of chromium found at the site.

Mr. Graham's focus will be on executing the job and getting the job done, working on an integrative closure approach to Material Disposal Area G (MDA-G) and Technical Area 21 (TA-21) and to stay on top of the groundwater issues at the LAB. He wanted to see the LANS organization be cost effective, have a priority of safety first and enhance the functional side of the organization. He planned to read recommendations from the CAB and stated he thought they would help bring check and balances to what they do.

Board questions/comments for Mr. Graham:

Dr. Campbell mentioned CAB Recommendation 2008-10, unanimously adopted earlier in the meeting, and he asked Mr. Rael, DOE to pass this recommendation on to Mr. Graham to get independent experts involved. Dr. Campbell understood there is an internal peer review but he noted this recommendation supports an external review. He also mentioned the letter to Mr. Winchell regarding what the Board has recommendations regarding the Corrective Measures Evaluation (CME) for MDA-G and other disposal areas at the Lab.

Mr. LaGattuta concurred with MDA-G being one of the most pressing concerns as well as TA-21, but a less visible area is MDA -A and MDA-B. He stated his opinion that the monitoring for those areas was insufficient and the study by the National Academy of Sciences (NAS) has recommended more wells as these areas carries a large burden of contaminated metals.

1 Mr. Baston welcomed Mr. Graham to his first meeting. Mr. Baston noted it was his first
2 meeting as well. Mr. Baston mentioned modeling and asked if Mr. Graham could explain a
3 little more. Dr. Campbell proposed preparing a request modeling discussion with Mr.
4 Katzman, LANS. Mr. Katzman addressed Mr. Baston's question. He stated the Water
5 Stewardship Program did do extensive modeling and that he would be happy to provide the
6 Board with another presentation.

8
9 **IX. Update on Consent Order, James Bearzi, NMED**

10 Mr. James Bearzi, NMED Hazardous Waste Bureau Chief, addressed the group.

11 *Mr. Bearzi stated that Dr. Campbell and Ms. Santistevan asked him to give an update*
12 *on the Consent Order—which he stated was a broad topic. He will attempt to put a finer*
13 *point on it by just discussing some key sites and then give a general update.*

14 *The Consent Order is now 3.5 years old, the Laboratory is performing work under it*
15 *and he maintains the work they have done under the Consent Order is considerable and he*
16 *believed the Lab would never have been doing half of that work if it had not been for the*
17 *Consent Order. There has been a marked increase of work done by the Lab under the Order.*

18 *Collectively, the NMED, the Laboratory, the oversight groups, the CAB are entering a*
19 *new phase now, a lot of investigation has been done, but not by any means all that will be*
20 *required. There are many tough decisions to be made and they are entering the remedy*
21 *selection phase—for many sites over the next couple of years. This goes for major sites that*
22 *people know about like Area G or any site where the first three letters are MDA (Material*
23 *Disposal Area). That means that the bulk of the characterization activities have already*
24 *been done. In addition, there are dozen and dozens of smaller sites that do not have a lot of*
25 *visibility but are included as groups of sites called Aggregate Areas that the Laboratory is*
26 *required to access. Work plans are approved on a staggered basis and then the state goes in*
27 *to look at them on an individual basis.*

28 *This phase of remedy selection has some key elements to it that we are not used to,*
29 *that nobody is used to, one is the Lab ensuring it has enough relevant data, and accurate*
30 *data to select a remedy. The LAB must know what is there, and that its knowledge is*
31 *commensurate with the remedy it prefers. The Consent Order requires the lab to identify*
32 *their preferred remedy, which is a little different from normal hazardous waste facilities*
33 *that do not have that requirement. The level to which the Lab can achieve the data*
34 *adequacy for remedies really dictates the conservativeness of the remedy that may be*
35 *ultimately selected. Put another way, if the lab does not have enough information about the*
36 *site but they are in the remedy selection, the state will impose a more conservative remedy.*
37 *Take for instance, a landfill that has a very good inventory of its contents, where there is a*
38 *lot of vadose zone data and there is groundwater data. Additionally, we understand the*
39 *stratigraphy under the site, we understand the aquifer under the site, how water moves in*
40 *the subsurface, how contaminants move in the subsurface and what those contaminants are,*
41 *and what is their fate and transport, then you can allow a less conservative remedy. With a*
42 *well-known site, the remedy can be more detailed because more information is known. One*
43 *would have monitoring requirements, for example if you had chosen the remedy to leave the*
44 *waste in place and put a cover on it to protect future workers, perhaps but also to protect*
45 *the wastes from rain and infiltration that might leach the content into the environment.*
46 *Such a remedy would have a lot of robust monitoring and that might be fine under some*

1 *circumstances. Now take the same landfill but you do not know anything about it. You do*
2 *not know the inventory, or you do not have a good handle on releases that may have*
3 *occurred from the landfill in the past, or you don't have a good handle on the geology or the*
4 *stratigraphy in the vadose zone and you don't know much about groundwater. That is okay*
5 *too so long as you excavate the contents of the landfill and move it somewhere else. This*
6 *would be an example of a more conservative remedy. The reality is you are always*
7 *somewhere in between those two examples and LANL is no exception to that. We have*
8 *remedy evaluation reports that have been submitted to NMED for a lot of the big sites, like*
9 *Area G and Area L and Area H and other sites that are less heard of like MDA-A out at TA-21*
10 *for example, or for intermediate and regional groundwater up at upper Canyon de Via, for*
11 *example, and all sites in between. Not every site goes through this formal remedy selection*
12 *process. For smaller sites, like septic tanks that had hazardous waste generated, they might*
13 *not go through a formal remedy process. In that type of case they investigate it and can just*
14 *determine a quick remedy.*

15 *Many processes occur simultaneously at many of the sites including characterization,*
16 *remedy selection and clean-up. These Remedy evaluation reports are required for many of*
17 *the major sites noted in the Consent Order. The schedules are listed in Section 12 of the*
18 *Order for the sites requiring a Corrective Measures Evaluation Report(CME).What the CMEs*
19 *are designed to do is make the Laboratory evaluate a range of remedies for a site.*
20 *Everything from a no action alternative to digging everything up and hauling it off the site*
21 *and everything in between, which might mean leave some of the waste in place, leaving all*
22 *the waste in place, covering, not covering, monitoring and stabilization. There may also be*
23 *soil vapor extraction components to the remedy if there is a vapor plume. If there is*
24 *groundwater, there may be an active remediation component needed to the remedy as well.*
25 *The Laboratory needs to evaluate the range of remedies and there are certain criteria*
26 *outlined in the Consent Order. The Order determines the requirements of the evaluation*
27 *and cost is a factor. Cost does matter, yet it is only one factor and there are many other*
28 *factors as well. How 'do-able' is the remedy, does it achieve the performance objectives of*
29 *protecting the human health and the environment to certain standards, which are spelled*
30 *out in the Order and elsewhere? Is this something that is going to last for a long time or will*
31 *they have to come back and do something later? All of these factors and many others are*
32 *considered. The Laboratory looks at the alternatives and submits a report that lists the*
33 *range of alternatives and they declare a preferred remedy. They submit their preferred*
34 *remedy to the state for review. If the state thinks it is lacking in any way, it will send a*
35 *notice out to the Lab saying we need you to address these different items and resubmit the*
36 *report or portions of it. Once it is approved, that means that it is complete and has all the*
37 *information for the range of alternatives and the state is happy with the contents of the*
38 *report. That is not the end of the story, which is not the actual remedy selection; it just*
39 *means that the Lab has done a good enough job evaluating the range of alternatives. At that*
40 *moment, the Laboratory no longer owns the CME, the state now owns the CME report. We*
41 *develop a Statement of Basis for the state's preferred remedy, it is a proposed final remedy,*
42 *and that is what goes out for public comment. It is the state's proposed final remedy and it*
43 *is the remedy that the state will defend. The state approves the CME report and issues a*
44 *Statement of Basis in a public Fact Sheet. MDA-H is a good past example of this process in*
45 *action. The Statement of Basis then goes out for public comment. Anybody can comment on*
46 *the remedy selection and the Statement of Basis and many people do. The state evaluates*

1 the comments and it responds to them. If the state does not get a request for a public
2 hearing it will look at the comments, make its final remedy selection based on the
3 comments, issue a document to the Laboratory that gives the State's final remedy selection
4 and their response to all the public comments. This same information is also released to the
5 public. Public comments are evaluated within 6 to 8 months but if there are hearing
6 requests submitted through the required process, then the NMED tries to first resolve issues
7 with the people who requested the hearing, this may take another 6 to 12 months—if the
8 requests for a hearing is not withdrawn then the process can take up to another 6 to 12
9 month for a public evidentiary hearing to be held. A hearing officer hears the case and
10 eventually makes a recommendation to the Secretary based on proposed findings of fact and
11 conclusions of law. Eventually, there is a decision made by the Secretary and even that
12 decision can be appealed within 30 days of the final decision. So that is not even the end of
13 the story necessarily.

14 Briefly, the next step is the Laboratory has to put together its plan of how it is going
15 to implement the remedy decision. This step is called the Corrective Measures
16 Implementation (CMI) Plan. This document has the details of the remedy; it also has many
17 details about long-term monitoring of air, soil, water, soil gas, biota, surface water and
18 groundwater. The laboratory is a long way from this step for any of its sites. The site that
19 is furthest along in the process is the surface and shallow alluvial groundwater for the 260
20 Outfall at TA-16. A final remedy has been proposed and the Lab is working with the state on
21 different pilots to determine what the scope of the remedy will be and where they are with
22 that CMI plan.

23 The Laboratory has submitted a CME report for MDA G in September 2008. There has
24 been no public notice of that report because the state has not approved it and there has
25 been no Statement of Basis issued by the state. In fact, the Lab will get its Notice of
26 Deficiency (NOD) on what is wrong with the CME for MDA G in a general sense tomorrow.
27 The notice date for the NOD from the state is January 31, 2009. The Lab has an opportunity
28 to address the things the state has asked it to and then the state looks at it one last time.
29 The state has to either approve the CME or ask the Lab to modify it in a particular way. In
30 this case, the Lab can expect the state to tell them how to modify the CME because it has
31 some flaws in it that are just too fundamental for the state to move forward with it. The
32 singular biggest flaw, which cannot be fixed by the end of January, is the lack of credible
33 groundwater data beneath Area G. They can expect direction from the state to modify in
34 January that requests a resubmission to include more groundwater data. The second
35 issue, without going into too much detail, is what is the Lab going to do and what has the
36 state asked the Lab to do in regards to arresting the migration of contaminants down the LA
37 Pueblo Canyon pathway via the surface water pathway. This has been a big issue in the news
38 around Santa Fe, Los Alamos and Pojoaque. Particularly, this has been brought forth because
39 of the Buckman direct diversion plan. The confluence of LA Canyon and the Rio Grande River
40 a few miles upstream of the planned Buckman diversion point has drawn significant attention
41 and is another big issue that is being driven by the requirements in the Consent Order.
42 There are dozens of other issues that are going on but these are the two biggest issues
43 concerning the Order right now.

44 Dr. Campbell thanked Mr. Bearzi for his comments and mentioned the letter to DOE
45 with a copy for NMED that addressed the Board's position on MDA-G over the past years

46 Mr. Bearzi fielded questions from the Board.

1 Mr. La Gattuta asked about the process of evaluating the CMEs. How did NMED go about being
2 sure they understood the report, do they employ outside experts to assist in the review?
3 Secondly, he asked about the status of Area H.

4 Mr. Bearzi replied the NMED does employ experts when it does not have the expertise
5 but not for MDA G because they have staff experts. When they do bring in outside experts is
6 generally related to modeling for air, groundwater modeling construction and cumulative risk
7 assessment. Mr. Bearzi stated they received many comments on Area H, which has many of
8 the same problems as Area G-- they see groundwater as the "long pole in the tent."

9 Mr. Baston asked if the NMED looked at the same databases and modeling as the
10 Laboratory? Mr. Bearzi replied they are looking at the same data but they do not ascribe a lot
11 of credibility to modeling, not from the Laboratory or anyone else, they rely more on hard
12 data. He stated the Lab used modeling that is not used in the industry; he gave the example
13 of open burn modeling. However, he reiterated that it was mandatory for the Lab to use
14 the same data as NMED.
15

16
17 **X. Update from EPA, Rich Mayer.**

18 Mr. Rich Mayer, Environmental Protection Agency Region 6, addressed the group. Mr.
19 Mayer provided information about the LANL Stormwater Solid Waste Management (SWMU)
20 permit and for the new members, he explained what SWMUs are: an old landfill or an old
21 surface disposal area. EPA drafted the individual SWMU permit for LANL and it is the first
22 such permit nationwide. He noted EPA has primacy for stormwater, NMED has primacy for
23 hazardous waste and DOE has primacy RAD waste. EPA authorized NMED for the hazardous
24 waste aspects. This stormwater permit is under the Clean Water Act and EPA has the lead for
25 issuing these types of permits. He announced the comment period is now closed and that the
26 EPA had over 70 pages of public comments including comments from the CAB. Currently, EPA
27 was in the process of officially responding to the comments and the responses are now in the
28 attorney stage and the bottom line was the permit should be finalized within the next few
29 months.

30 Mr. Mayer reported that the Ada Laboratory was in the process of reviewing two
31 documents (at the CABs request) (1) The LANL Well Screen Analysis Report—to provide input
32 as to whether the LANL well screens were providing reliable results, and (2) the Ada
33 Laboratory was also in the process of reviewing the LANL Groundwater Background
34 Investigation Report.. Mr. Mayer has talked to the Ada scientists conducting the reviews,
35 Steve Acre and Rick Wilken. Both are nearing completion with their reviews.
36

37
38 **XI. Comments from George Rael, DOE.**

39 Mr. Rael extended a welcome to Ms. Brennen, DFO and Mr. Graham, LANS. He was
40 impressed with Mr. Graham and thought he would be a great help at the Lab. Mr. Rael
41 discussed the budget status: \$164 million budget under continuing resolution, for LANL EM
42 Program.

43 March 6th may bring another continuing resolution. DOE builds its budgets 2 years in
44 advance. They will be presenting the FY'10 to the Congress in February 2009, but FY'11 may

1 have to wait until the new administration comes on board. The budget was still very fluid and
2 he stated he would communicate with the CAB as information became available.

3 Mr. Rael highlighted the completion of getting the high activity drums off the hill,
4 which was a 2002 project started with 200 high activity drums above ground. He considered
5 this a big accomplishment.

6 He announced another success that will affect the CAB positively: the RACER database tool
7 has gone public. The RACER database was an open source public database. It has 6 million
8 samples and one can go online and run risk scenarios using real time data; the same data that
9 the Laboratory uses. They have made the RACER data public hoping that more people will use
10 the database.

11 Ms. Gaziano wanted to thank Mr. Rael for the RACER presentation; she brought
12 handouts and information from the presentation for the members.
13

14 XII. Public Comment Period

15 Mr. Bob Gilkeson signed up for public comment. He thanked the members of the CAB
16 for entertaining his comments. He explained his past interaction with the CAB. He brought a
17 report he authored in 2004 to the CAB to review. He stated his report helped to get EPA to do
18 a study for the CAB regarding the reliability of data retrieved from LANL's monitoring wells.
19 His report talked about the use of bentonite clay and other muds, used in the process of
20 drilling wells used for LANL characterization and monitoring. The use of the muds, he stated,
21 had actually prevented the accurate detection of contaminants. The reports from EPA
22 supported his findings. Then DOE commissioned the NAS to do a study and they issued a
23 report, which also supported his findings. He stated his belief that many of the wells at LANL
24 still do not produce reliable data. He wanted to see EPA's review of the LANL Well Screen
25 Analysis Report (WSAR). EPA was reviewing the WSAR report at the request of the CAB. Mr.
26 Gilkeson has a problem with the LANL well location map. He stated there were mistakes in
27 the map. For example, the sentry well R-16 was set in a perched zone of saturation, which
28 needed to be fixed. The curious flow field around the chromium also needed to be
29 understood.
30
31

32 XIII. Presentation on LANL Environmental Surveillance Report (ESR)

33 The following LANL Subject Matter Expert (SME) provided the CAB members with a
34 PowerPoint Presentation entitled, "Environmental Surveillance at Los Alamos during 2007, LA-
35 UR-08-0741." Each of the LANL SMEs presented on their area of specialization referenced in
36 the report.
37

38 Ms. Bonds-Lopez, LANL, introduced the presenters and discussed the complexity of the
39 ESR. She noted LANL staff members were giving the presentations. There was also a student
40 version produced, "Summary of Environmental Surveillance at Los Alamos during 2007," which
41 would be out for distribution next month.

42 The ESR served as the Laboratory's annual release of all its environmental data to the
43 public. Mr. Terry Morgan, LANS announced the data noted in the report was also available on
44 the online RACER database at www.racernm.com. The Lab has produced an ESR since 1972.

Mr. Terry Morgan provided the report overview and compliance status. Mr. Andrew Green went over the section on air surveillance. Mr. David Rogers covered Groundwater Monitoring while Mr. Steve Reneau concentrated on watershed monitoring. Mr. Phil Fresquez presented information regarding soil, foodstuffs and biota monitoring. Lastly, Mr. Michael McNaughton discussed Rad and Non-Rad dose assessment.

A copy of the ESR PowerPoint presentation can be requested from the CAB [via email](#).

XIV. Open Discussion from Board Members

Mr. LaGattuta requested his comments regarding criticism of LANL's "Environmental Surveillance Report (ESR) from 2007" be included with these minutes. Mr. LaGattuta's comments can be found in the Attachment Section of these minutes.

Mr. Maestas asked about the procedures for the minutes. He encouraged people to read the draft minutes prior to the formal meeting and to suggest changes in advance and limit the discussion at formal meetings. Ms. Novak already sends the draft minutes out in advance by email and a printed copy of the draft is also available in the CAB office for review.

Mr. Baston wanted to get the ISO auditor for a presentation to the CAB.

Mr. LaGattuta asked Mr. Katzman, LANL, if the high level dose of chromium coming from well R-42 surprised him? Mr. Katzman replied the drilling of R-42 was planned to evaluate levels around that area. He believed there may be an entry point right around the location of R-42. So R-42 was installed to try to locate this entry point and so far they are not seeing anything out of the range of their conceptual model.

Mr. Gallegos would still like to attend the January Executive Committee meeting to discuss the Buckman Diversion Project.

Mr. Loya thanked the CAB staff and Ms. Bonds-Lopez for coordinating the presentation.

Ms. Santistevan announced the January 2009 CAB Board meeting would be held at the Holiday Day in Santa Fe.

– A summary of the meeting's action items and other announcements:

- Approved Recommendations 2008-10 and 2008-11 for submission to the DOE.
- Approved Letter to Mr. Donald Winchell, Jr., LASO.
- Happy birthday to Mr. Casalina!
- Thank you to Ms. Brennan, DFO, for attending the meeting.
- Welcome to Mr. Graham, LANS.
- Thank you to Mr. Bearzi, NMED and Mr. Mayer, EPA for their comments.
- Welcome to all the new members.

XV. Adjournment

Mr. Casalina, DDFO, adjourned the meeting at 8:10 p.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. Final 11-19-08 CAB Meeting Agenda.
2. NNM CAB correspondence to Donald Winchell.
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. Report from Ralph Phelps, Chair, WM Committee.
7. Draft Recommendations 2008-10 and 2008-11.
8. Public Comment Handouts from Bob Gilkeson.
9. "Environmental Surveillance at Los Alamos during 2007, Executive Summary," LA-UR-14369-ENV.
10. LANL PowerPoint Presentation, "Environmental Surveillance at Los Alamos during 2007," Terry Morgan, Waste and Environmental Services, LA-UR-08-0741.
11. Ken LaGattuta's Written Comments from the 11-19-08 CAB Meeting. Mr. LaGattuta requested inclusion in the minutes. Re-printed below:

"It is a matter of concern to me that LANL, in its ESR for 2007, almost always reports contamination levels found to be above NMED standards in an abbreviated textual format, while referring to cases in which contamination levels are found to be below standards in a more comprehensive fashion. For example, on p. 13 of the Executive Summary, in a sidebar, the following text appears: "LANL detected chromium contamination in the regional aquifer under one canyon at concentrations above the NM Groundwater Standards and under an adjacent canyon at 70% of the standard." But, it would seem to me to be more forthcoming, and more descriptive of the actual facts, to have said instead that: "LANL detected chromium contamination in the regional aquifer under one canyon at concentrations 800% above the NM Groundwater Standards and under an adjacent canyon at 70% of the standard." Language identical to that cited above, from the Executive Summary, also appears in the full ESR on p. 15, just after Figure ES-4, and again on p. 136 of Chapter 5. Similar, if not identical, language can also be found, at several locations, in the ESR for 2006. It seems to me that LANL should assiduously avoid giving the impression that it is minimizing, or disguising, the significance of environmental problems that it has caused. Obviously, this is particularly

important when reporting measurements to the public; i.e., such as in the ESR. Although a disclosure of the size of measured exceedances can be found in figure format (through several Figures included in the full ESR), I believe that, when conveyed in text, this information becomes much more accessible to the general public, while, it is true that it would be harmful to report data using inflammatory language, nevertheless measured data should be described fully, and in an unbiased fashion. It is insufficient, in my opinion, to report complete data only in figure format while, in an accompanying text, to omit references to the actual size of embarrassing exceedances.

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 here in these minutes, please call the CAB office at (505)-989-1662.