

General




Northern New Mexico Citizens' Advisory Board
A U.S. Department of Energy Site-Specific Advisory Board
1660 Old Pecos Trail, Suite B, Santa Fe, NM 87505
Phone: 505.989.1662 or 1.800.218.5942
Fax: 505.989.1752 www.nnmcab.org

November 23, 2011

Dear Board Members,

Enclosed is the information you will need for the November 30th meeting of the Northern New Mexico Citizens' Advisory Board. The meeting will be held at the Ohkay Owingeh Conference Center in Espanola. **Please park and enter on the north side of the facility.**

You will hear a presentation on "Possible Impacts of WIPP Expansion Proposals on LANL Clean-up and the Consent Order" by Scott Kovak. Robert Neill will make a presentation entitled "Some Unlearned Lessons on Radioactive Waste Disposal".

If you require an excused absence, you must request this in writing to: Lee Bishop, Lee.Bishop@nnsa.doe.gov; or to Ed Worth, Edwin.Worth@nnsa.doe.gov.

If you have any questions or require additional information, please do not hesitate to contact me. I look forward to seeing you all on Nov. 30th!

Kindest Regards,

Menice B. Santistevan
Executive Director



34957



Northern New Mexico Citizens' Advisory Board Meeting
November 30th, 2011
1:00 p.m. to 7:00 p.m.
Ohkay Owingeh Conference Center
San Juan Pueblo, New Mexico

AGENDA

<u>Time</u>	<u>Action</u>	<u>Presenter</u>
1:00 p.m.	Call to Order	Co-DDFOs
	Establishment of a Quorum (9 needed)	
	a. Roll Call	Karen Erickson
	b. Excused Absences	
	Welcome and Introductions	Ralph Phelps
	Welcome to Ohkay Owingeh Pueblo	Governor Ron Lovato
	Approval of Agenda	
	Approval of Minutes of September 28 th , 2011	
1:30 p.m.	Public Comment Period	
1:45 p.m.	Old Business	
	a. Written Reports – See Packet Enclosures (5 minutes)	
	b. Voting Re-verification on Rec. 2011-06	
	c. Other items	
2:00p.m.	New Business	
	a. Consideration and Action on 2011 Self Evaluation (Section X. of Bylaws)	Carlos Valdez
	b. Other items	
2:30 p.m.	Items from DDFO's	Lee Bishop and Ed Worth
	a. Definition of one contaminant (as requested)	
	b. Update on Move to New Office	
	c. Other items	
3:00 p.m.	Break	
3:15 p.m.	"Possible Impacts of WIPP Expansion Proposals on LANL Clean-up and the Consent Order"	Scott Kovak, Nuclear Watch NM
4:00 p.m.	"Some Unlearned Lessons on Radioactive Waste Disposal"	Robert Neill
5:00 p.m.	Dinner Break	
6:00 p.m.	Public Comment Period	
6:15 p.m.	Looking Ahead to 2012 – Discussion on Future Recommendations and Activities	Ralph Phelps
6:45 p.m.	Wrap up and Comments from Board Members	Ralph Phelps
7:00 p.m.	Adjourn	Co-DDFOs



Northern New Mexico Citizens' Advisory Board Meeting
September 28, 2011
1:00 p.m. to 7:00 p.m.
Meeting Location: Sagebrush Inn Conference Center
Taos, New Mexico
MINUTES

Meeting Attendees:

Department of Energy:

Lee Bishop, Co-Deputy Designated Federal Officer (DDFO)

Ed Worth, Co-Deputy Designated Federal Officer (DDFO)

Pete Maggiore, Deputy Assistant Manager for Environmental Operations

NNMCAB Members:

1. Ralph Phelps, NNMCAB Chair
 2. Robert Gallegos, NNMCAB Vice Chair
 3. Pam Gilchrist, EMSR Committee Co-Chair
 4. Deb Shaw, EMSR Committee Co-Chair
 5. Manuel Pacheco, WM Committee Chair
 6. Lawrence Longacre
 7. Gerry Maestas
 8. Nicole Castellano
 9. Carlos Valdez
 10. Nona Girardi
 11. Doug Sayre
 12. Bob Villarrael
 13. Nick Maestas
-

Excused Absences:

Michael Loya
Caroline Mason
Lawrence Garcia

Marked Absent:

Jacqueline Gutierrez

NNMCAB Staff:

Menice Santistevan, Executive Director
Karen Erickson, Technical Writer

1 **Grace Roybal, Office Administrator**
2 **Edward Roybal, Sound Technician**

3
4 **Guests-**

- 5 **1. Michele Jacquez Ortiz, Senator Tom Udall's Office**
 - 6 **2. Lorrie Bonds Lopez, LANL**
 - 7 **3. Amy Quintana, Taos Town Council**
 - 8 **4. Lena Lopez**
 - 9 **5. Thomas P. Longo, DOE/NNSA Office of Environmental Operations**
 - 10 **6. Jeri Clausin, Associated Press**
 - 11 **7. Colleen Curran, LANL**
 - 12 **8. Diego Guillen, Espoir, Inc.**
 - 13 **9. Bonnie Lucas**
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- 1 **AGENDA**
- 2 **I. Call to Order**
- 3 **II. Establishment of Quorum (9 needed)**
- 4 **a. Roll Call**
- 5 **b. Excused Absences**
- 6 **III. Welcome and Introductions**
- 7 **IV. Approval of Agenda**
- 8 **V. Approval of Minutes of July 27, 2011**
- 9 **VI. Public Comment Period**
- 10 **VII. Old Business**
- 11 **a. Written Reports**
- 12 **b. Other Items**
- 13 **VIII. New Business**
- 14 **a. Report from Nominating Committee (Section V., F. of NNMCAB Bylaws)**
- 15 **b. Election of Chair and Vice-Chair for FY '12**
- 16 **c. Consideration and Action on FY '12 Committee Work Plans**
- 17 **d. Consideration and Action on "Top Three Issues"**
- 18 **e. Discuss NNMCAB Meeting Locations for 2012**
- 19 **f. Appoint Ad Hoc Committee for Annual Self-Evaluation**
- 20 **g. Other Items**
- 21 **IX. Items from DDFOs**
- 22 **X. Presentation on Long-Term Stewardship – Tom Longo**
- 23 **XI. Discussion on Draft Recommendation to the DOE**
- 24 **XII. Public Comment Period**
- 25 **XIII. Consideration and Action on Draft Recommendation 2011-06 (Tabled on 7/20/2011):**
- 26 **"Statement that LANL Be Selected as a Screening Lab for Certain Greater Than Class C**
- 27 **Low-Level Radioactive Wastes prior to Disposal at the WIPP Repository"**
- 28 **XIV. Wrap-up and Comments from Board Members**
- 29 **XV. Adjournment**
- 30

- 31

1 **MINUTES**

2 **I. Call to Order**

3 The regular bi-monthly meeting of the Northern New Mexico Citizens' Advisory Board
4 (NNMCAB or CAB) meeting was held on September 28, 2011 at the Sagebrush Inn and
5 Conference Center in Taos, New Mexico. Mr. Worth, Co-Deputy Designated Federal Officer
6 (DDFO), stated that on behalf of the Department of Energy (DOE), the regular bi-monthly
7 meeting of the NNMCAB was called to order at 1:00 p.m.

8 Mr. Worth recognized Mr. Phelps as NNMCAB Chair. The Chair presided at the meeting.
9 The regular meeting of the NNMCAB was open to the public and posted in **The Federal Register**
10 in accordance with **The Federal Advisory Committee Act**.

12 **II. Establishment of a Quorum (9 needed)**

13 **a. Roll Call**

14 Ms. Erickson conducted roll call as the members arrived. Nine members were present
15 at the meeting at the time of roll call, which comprised a quorum for conducting business.

16 **b. Excused Absences**

17 Mr. Worth and Mr. Bishop, Co-DDFOs, had previously approved excused absences for
18 Ms. Caroline Mason, Mr. Lawrence Garcia, and Mr. Michael Loya.
19
20

22 **III. Welcome and Introductions**

23 Mr. Phelps welcomed everyone to the meeting. He stated his appreciation for
24 everyone's attendance.

25 Amy Quintana, Taos Council member, welcomed those present on behalf of the Town of
26 Taos.

27 Mr. Phelps asked for introductions from the members and guests in attendance.
28
29

30 **IV. Approval of Agenda**

31 The board reviewed the September 28, 2011 CAB meeting agenda. Mr. Phelps called for
32 any comments or additions to the agenda. The board would hear a presentation by Tom Longo
33 on Long-Term Stewardship. The board would also consider a draft recommendation for
34 submittal to DOE.

35 **Mr. Pacheco moved to approve the agenda as amended and Mr. Valdez seconded the**
36 **motion. The meeting agenda was unanimously approved.**
37

38 **V. Approval of Minutes of July 27, 2011**

39 The board reviewed the minutes from the July 27, 2011 CAB meeting. By ongoing
40 instructions from DOE Headquarters, the minutes were previously reviewed and certified by the
41 NNMCAB Chair, Mr. Ralph Phelps. Mr. Phelps stated that the July minutes were included in the
42 board packets and presented at this meeting for board approval.
43

44 **Mr. Gallegos moved to approve the minutes as presented. Rev. Gilchrist seconded the**

1 motion. The minutes were unanimously approved.
2

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4 **VI. Public Comment Period**

5 No one signed up for the first public comment period.
6

7
8 **VII. Old Business**

9 **a. Written Reports**

10 **1. Waste Management (WM) Committee**

11 A printed copy of the WM Committee's work plan for Fiscal Year (FY) 2012 was
12 included in the meeting packet and a copy may be obtained by request from the CAB
13 office at (505) 989-1662. Mr. Pacheco reported that the Waste Management
14 Committee met last month, but will wait until the November committee meeting to
15 report more information to the NNMCAB.

16 **2. Environmental Monitoring, Remediation and Surveillance (EMSR) Committee**

17 A printed copy of the EMSR Committee's work plan for FY 2012 was included in
18 the meeting packet and a copy may be obtained by request from the CAB office at (505)
19 989-1662. Dr. Shaw reported that the committee is modifying its work plan slightly.
20 Rev. Gilchrist added that they will likely make one more switch to the plan, moving the
21 riparian systems investigation to the surface water section.

22 **3. NNMCAB Chair's Report**

23 A printed copy of the Chair's Report was included in the meeting packet and a
24 copy may be obtained by request from the CAB office at (505) 989-1662. Mr. Phelps
25 briefly reviewed the main points in the Chair's report:

26 Routine Chair Activities since last NNMCAB meeting on July 27, 2011 included
27 the following:

28 a. Executive Committee met on August 10, 2011:

- 29 • Spent time discussing revised goals for membership targets and
30 directional objectives for the entire CAB, agreeing to increase
31 membership closer to 27 and to provide better educational
32 opportunities for new members. A summary of this discussion
33 was e-mailed to members in the form of a CAB Initiative White
34 Paper, which is also attached to the Chair's Report.
- 35 • Set timing of Waste Isolation Pilot Plant (WIPP) tour for November
36 7-8, 2011. Nineteen members and guests are signed up.
- 37 • Requested candidate statements for 2012 new officers.
- 38 • Approved agenda for the September 28, 2011 CAB meeting in
39 Taos.

40 b. Executive Committee met on September 14, 2011:

- 41 • The initiative to bring the CAB membership up to allowed limits
42 and to increase community education was approved by the
43 Executive Committee.

- The Top Three Issues were reviewed for the October 20, 2011 Chairs videoconference, with a few recommended changes.
 - The CAB office relocation to Pojoaque is expected to occur in late October or early November 2011.
 - Approved final agenda for the September 28, 2011 CAB meeting.
 - Approved the proposed 2012 CAB meeting locations and dates.
- c. Supported the WM/EMSR Joint Committee meeting on August 10, 2011. Main activities included discussion of work plans, interest in member conference attendance, and a presentation by Los Alamos National Laboratory's (LANL's) three EM interns on the 2010 Environmental Surveillance Report.

Site-Specific Advisory Board (SSAB) Related Chair Activities since last NNMCAB meeting on July 27, 2011 included the following:

- a. A Chairs quarterly conference call was scheduled on September 19, 2011 to provide DOE/Environmental Management (EM) senior staff briefings on budget, waste disposition, EMAB and Chair local board updates. Also scheduled was a discussion of the agenda for the SSAB Chairs videoconference on October 20, 2011.

Other Related Chair Activities included the following:

- a. The Chair and Vice Chair were invited to meet on September 14, 2011 with Ms. Michelle Jacquez-Ortiz from Senator Tom Udall's staff to discuss items of importance to the CAB. This meeting provided for renewed contacts with the Senator's staff, review of CAB priorities, key recommendations, and funding to meet the Consent Order goals. Items of concern from the Senator's office included Risk Analysis, Communication, Evaluation, and Reduction (RACER) data and communication of monitoring stations damaged in post-fire flooding. Ms. Jacquez-Ortiz indicated the CAB could be helpful through recommendations in these areas. Ms. Santistevan agreed to provide her with previous CAB recommendations in these areas.

- b. The Chair was invited to participate in the annual Federal Facility Cleanup Dialog meeting hosted by the Environmental Protection Agency (EPA) in Washington, DC on September 21-22, 2011. A report on this meeting may be obtained by request from the CAB office at (505) 989-1662. Mr. Phelps reported on highlights of the meeting, which was attended by three CAB chairs from Hanford, Portsmouth, and Northern New Mexico. About 30 people were at the table, including the EPA and activist groups. The meeting focused on two issues:

1. Use of the five-year review, which LANL does not currently have, but is something to keep in mind; and
2. Selection of long-term monitoring for the sites – how they introduce long-term surveillance programs, how they are communicated to communities.

Mr. Phelps reported that problems around the country are similar to those found here in New Mexico, including getting people involved, communicating our message, etc. Mr. Gallegos clarified that the five-year review is for

1 Comprehensive Environmental Response, Compensation, and Liability Act
2 (CERCLA) sites, but Mr. Phelps confirmed that we could do that, or something
3 similar, here. Mr. Bishop mentioned that the speaker, Tom Longo, might touch
4 on some of those issues, but added that other sites monitor hazardous, not
5 radioactive, waste, which is monitored separately. Thus, five-year reviews are
6 not compulsory, as much of our closure activities are covered through those
7 procedures.

8 **3. NNMCAB Executive Director's Report**

9 A printed copy of Ms. Santistevan's report was included in the meeting packet
10 and a copy may be obtained by request from the CAB office at (505) 989-1662. Ms.
11 Santistevan's report included:

12 a. Board Membership Update:

13 The NNMCAB is currently comprised of 15 members, eight of whom are
14 up for reappointment in November: Nicole Castellano, Lawrence Garcia,
15 Jacquelyn Gutierrez, Lawrence Longacre, Caroline Mason, Manuel Pacheco,
16 Carlos Valdez, and Robert Villarrael. Two other nominees were included in the
17 nomination package and we hope to make site appointments for Mayor Lucero's
18 nominees. The updated CAB Directory was included in meeting packets;
19 members were asked to be sure that their contact information was correct.

20 b. Executive Committee Meetings:

21 The committee met on August 10, 2011, and September 14, 2011. The
22 committee heard reports from the Chair, Committee Chairs, Co-DDFOs, and
23 Executive Director. The committee finalized the agenda for this meeting and
24 discussed draft recommendations for future CAB consideration as well as the
25 NNMCAB office move. The committee also discussed the basis of the NNMCAB
26 Initiative, which would increase NNMCAB membership to 27 and would focus
27 more on Speakers' Bureau presentations and outreach.

28 c. Board Meeting Preparations:

29 Ms. Santistevan prepared and submitted agendas for this meeting and
30 the notice to **The Federal Register**, in compliance with **The Federal Advisory**
31 **Committee Act**.

32 Meeting materials were copied and collated by Ms. Roybal and meeting packets
33 were mailed out on July 21, 2011. An advertisement for the meeting was placed in *The*
34 *Taos News* by Ms. Roybal and on the NNMCAB website.

35 d. EM Site-Specific Advisory Board Chairs' Meeting:

36 In lieu of a fall Chairs' meeting this year, a videoconference will be held
37 on October 20, 2011 at the Los Alamos Site Office (LASO). Acting EM-1 David
38 Huizenga is scheduled to speak, along with Joann Luczak giving a budget
39 presentation, Frank Marcinowski giving a Technical and Regulatory Support
40 update, and Marty Letourneau giving a Waste Management update. Each site
41 will present its Top Three Issues and Accomplishments. The spring Chairs;
42 meeting is scheduled in April and will be hosted by the Paducah CAB.

43 e. Outreach:

1 With the initiative of recruiting up to nine additional board members, Ms.
2 Santistevan reported she will be very busy recruiting applicants around northern
3 New Mexico. She will especially concentrate on recruiting members from the
4 surrounding pueblos and young people from local colleges and universities.
5 Members were asked to assist Ms. Santistevan with referrals of people who
6 might be interested.

7 f. WIPP Tour:

8 The tour of the WIPP site has been scheduled. The bus will leave from
9 Santa Fe early on November 7, 2011 and the tour of the site will take place the
10 morning of November 8. The bus will return to Santa Fe that evening.

11 g. Office Management:

12 Office space in Pojoaque has been identified for the new NNMCAB office
13 and LANL reading room. Ms. Roybal and Ms. Santistevan have been assisting
14 with projected costs for utilities, office equipment, etc. The office move is
15 scheduled for November. The staff supported all committee meetings with
16 preparation of notices, agendas, and committee minutes.

17 Karen Erickson has been hired to assist with NNMCAB support. She will
18 be preparing meeting minutes, updating the NNMCAB website, and preparing
19 NNMCAB newsletters and the Annual Report. She may be reached at
20 karen.erickson@nnsa.doe.gov or at (505) 988-1749.

21 h. Next Board Meeting

22 The next NNMCAB meeting will take place November 30, 2011 at the
23 Ohkay Owingeh Conference Center at Ohkay Owingeh Pueblo.
24

25
26 **VIII. New Business**

27 **a. Consideration and Action on Committee Work Plans**

28 Mr. Gallegos asked, what has been added or changed since the committees
29 approved the plans? Rev. Gilchrist said that clarification was added, some items were
30 moved to different sections, mission statement goals were clarified, and long-term
31 stewardship was added.

32 **Mr. Gallegos moved to approve both work plans. Mr. Pacheco seconded the**
33 **motion. The work plans were unanimously approved.**

34 Mr. Phelps advised the members that the work plans should be considered fluid
35 documents that may change as needed throughout the year.
36

37 **b. Consideration and Action on Top Three Issues**

38 Mr. Phelps opened the floor for discussion of the Top Three Issues to be
39 presented at the next Chairs' meeting videoconference October 20, 2011 to the EM-1
40 Acting Assistant Secretary, David Huizenga.

41 Rev. Gilchrist made some wording suggestions to make things understandable,
42 which will be discussed in the next EMSR committee meeting.

43 Discussion ensued on precisely which and how much waste is included on the
44 second of the Top Three Issues, and how that work is funded. Mr. Longacre expressed a

1 desire to use stronger wording in the issues to give them more power, with which Rev.
2 Gilchrist agreed, adding a suggestion to use clearer language in the draft
3 recommendations. Mr. Worth explained that a liaison from the New Mexico
4 Environment Department (NMED) will be present at the CAB within a meeting or two,
5 and that increased funding demonstrates the recognition of the importance of the
6 board's role to act as advisories to DOE.

7 Mr. Gallegos moved to accept the Top Three Issues. Ms. Castellano seconded the
8 motion. The motion passed, with Mr. Longacre abstaining.

9
10 **c. Report from Nominating Committee**

11 Dr. Shaw announced that nominations have been received, but can still be
12 entertained from the floor. Mr. Gallegos withdrew his nomination for Chair. Vice Chair
13 nominees included Mr. Pacheco, Mr. Valdez, and Ms. Mason. Dr. Shaw moved to
14 nominate Mr. Phelps as Chair; Mr. N. Maestas seconded the motion. Mr. Pacheco
15 nominated Mr. Longacre for Chair, but Mr. Longacre declined the nomination. Mr
16 Phelps explained that while he supports term limits, under the circumstances he agreed
17 to run for Chair once again.

18
19 **d. Election of Chair and Vice-Chair for FY2012**

20 Mr. Sayre moved to accept Mr. Phelps as Chair. Rev. Gilchrist seconded the
21 motion. Mr. Pacheco moved to close nominations for Chair. Rev. Gilchrist seconded the
22 motion. The motion passed unanimously.

23 Ms. Castellano moved to close nominations for Vice Chair. Mr. Pacheco
24 seconded the motion. Ms. Santistevan collected written ballots and announced that the
25 new Vice Chair is Mr. Valdez effective Oct. 1.

26
27 **e. Discussion of NNMCAB Meeting Locations for 2012**

28 Locations for the six NNMCAB meetings in 2012 were presented. Mr. Maestas
29 inquired about the rationale of rotating the meeting locations and in particular holding a
30 meeting in Albuquerque, citing the importance of making it easy for CAB members to
31 attend. Mr. Gallegos cited the CAB's desire to dedicate a meeting to the subject of
32 surface water contaminant transfer issues that affect the Rio Grande in the Albuquerque
33 area.

34 Further discussion centered on publicizing meetings to maximize visibility to our
35 represented areas and to increase attendance. Rotating meeting locations is common
36 to other SSABs and has been done for many years.

37
38 **f. Appointing of Ad Hoc Committee for Annual Self-Evaluation**

39 Mr. Phelps requested three volunteers to serve on an ad hoc committee to
40 review the annual self-evaluation survey for the CAB. Survey results help the CAB make
41 changes based on self-appraisal of lessons learned. Dr. Shaw, Mr. Valdez, and Ms.
42 Castellano volunteered to serve on the committee.

43
44 **IX. Items from DDFOs**

1 Mr. Pacheco moved to take off the table and reconsider Draft Recommendation
2 2011-06. Dr. Shaw seconded the motion. The motion to take off the table and reconsider the
3 recommendation passed unanimously and discussion then ensued.

4 Mr. Villarrael provided a brief refresher of the recommendation for the CAB.
5 Among the points he addressed were: a) WIPP is the only repository prepared and able to
6 handle the type of waste cited in the recommendation; b) waste includes, for example,
7 decommissioned nuclear reactors that could represent a great risk if encountered by terrorists
8 or even the general public; c) a screening facility is needed to classify the waste coming in
9 before shipment to a permanent repository such as WIPP, and LANL has been doing this type of
10 screening work for several years.

11 The Board discussed possible other facilities that could serve as screening labs,
12 as well as how long the waste would stay at the screening lab before shipping to the permanent
13 repository, including waste identified as non-WIPP eligible. Members discussed the dilemma of
14 recommending more waste to be shipped to LANL when the NNMCAB's mission has mainly
15 revolved around getting waste off the hill, and how this recommendation could thus be
16 communicated in a positive light to the public, if passed.

17 Mr. Bishop and Mr. Villarrael explained the process of neutralizing the neutron
18 sources, clarifying that such neutralization only involves making the materials non-explosive
19 and separating the elements chemically, not changing the sources' radioactivity. Mr. Villarrael
20 reported that waste would typically be neutralized within several weeks to several months,
21 possibly up to 18 months, before shipment to WIPP. Waste not able to be shipped to WIPP
22 would stay at LANL until an alternative site was identified and ready to accept it. This new
23 waste for screening would represent an amount equal to half of a football field, waist deep, and
24 in addition to increased volume, an increased risk would also be involved, as these sources
25 could be from terrorist devices with greater explosive and contaminant dangers than the waste
26 currently being handled.

27 Mr. Gallegos pointed out that there is a current "hole" in the Environmental
28 Impact Statement (EIS) that fails to consider this issue of GTCC waste and where to store it
29 permanently. Mr. Bishop said that another EIS could be developed in the future to address
30 separate issues of a repository and a screening lab, with each possibly including four to five
31 different possible sites. Congress would also have to approve the use of WIPP for non-defense
32 related waste. Although Congress could theoretically reject WIPP as a repository, with the
33 NNMCAB's recommendation it would almost certainly be analyzed as a major alternative.

34 Concerns regarding the recommendation were discussed, including a) future
35 activity that might change the need for the recommendation; b) vague language excluding
36 mention of LANL specifically as the screening lab; and c) what would happen to waste not
37 eligible to be shipped to WIPP. Once identified as waste, the sources cannot be returned to
38 those that generated it.

39 Benefits to LANL to passing the recommendation, according to Mr. Bishop,
40 include jobs, promotion of the NNMCAB's mission, public health, and national security. Mr.
41 Villarrael added that he does not think there is any kind of waste that LANL could not handle
42 and neutralize in at least some manner, more safely and efficiently than any other facility.
43 Reasons for tabling or rejecting the recommendation, according to Rev. Gilchrist (also speaking
44 on behalf of Ms. Mason, who had expressed her concerns in an email sent to NNMCAB

1 members prior to the meeting), include the possible continuous stream of waste exceeding that
2 which had already been identified, the potential for some waste to get stuck at LANL, the
3 community's enthusiasm for getting waste out of Los Alamos, and the "hole" in the EIS
4 previously mentioned.
5

6
7 **XIII. Consideration and Action on Draft Recommendation to DOE**

8 Mr. Phelps closed discussion of the recommendation and reviewed the rules,
9 confirming that a quorum was present and explaining that a vote of 75 percent would be
10 needed to approve the recommendation. Voting as "present" or abstaining from voting would
11 not count in the vote totals, which would be conducted by a show of hands, with Ms. Erickson
12 counting.

13 Members asked questions to clarify the title and language of the
14 recommendation and whether the vote would be to approve LANL as the screening site.
15 Because of the nonspecific title of the recommendation and other desired changes to the
16 language therein, several members entertained the desirability of tabling the recommendation.

17 **Ms. Castellano moved to table the vote on Draft Recommendation 2011-06 to**
18 **the next meeting. Mr. Valdez seconded the motion. The motion passed with 11 ayes and 1**
19 **nay.**

20 Ms. Santistevan explained that the recommendation could be voted upon at the
21 next combined committee meeting scheduled for October 12 if a quorum were present there,
22 and that she has already taken necessary measures for public notification.
23

24
25 **XIII. Wrap-Up**

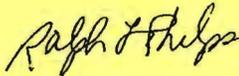
26 Ms. Roybal distributed paperwork for travel reimbursement via direct deposit. CAB
27 members were asked to give hotel receipts to Ms. Roybal for processing.

28 Mr. Phelps thanked Ms. Roybal, Ms. Erickson, and Mr. Roybal for their help during the
29 meeting. Mr. Bishop thanked those present for a spirited debate.
30

31
32 **XIV. Adjournment**

33 **With no further business to discuss, Mr. Bishop, Co-DDFO, adjourned the meeting at**
34 **7:30 p.m.**

35
36 **Respectfully submitted as a draft for review,**



37
38 **Ralph Phelps, Chair, NNMCAB**

39
40 ***Minutes prepared by Karen Erickson, NNMCAB Technical Writer**
41

1 **Attachments:**

- 2 1. **Final 9-28-2011 NNMCAB Meeting Agenda**
- 3 2. **Final 7-27-2011 NNMCAB Meeting Minutes**
- 4 3. **Final Waste Management Committee 2012 Work Plan**
- 5 4. **Final Environmental Monitoring, Remediation & Surveillance Committee 2012 Work Plan**
- 6 5. **Report from Ralph Phelps, NNMCAB Chair**
- 7 6. **Report from Menice Santistevan, NNMCAB Executive Director**
- 8 7. **Top Three Issues for NNMCAB for 2012**
- 9 8. **Draft NNMCAB 2012 Board Meeting Schedule and Locations**
- 10 9. **PowerPoint Presentation, "Overview of DOE/NNSA Long-Term Stewardship Programs,"**
- 11 **presented by T.P. Longo, NNSA-HQ/NA-173, Office of Environmental Operations**
- 12 10. **Draft Recommendation 2011-06, "Statement that LANL Be Selected as a Screening Lab for**
- 13 **Certain Greater Than Class C Low-Level Radioactive Wastes prior to Disposal at the WIPP**
- 14 **Repository," drafted by the Waste Management Committee, primary author Robert**
- 15 **Villarreal**
- 16

17 **Public Notice:**

18  ***All NNMCAB meetings are recorded. Audiotapes have been placed on file for review at**

19 **the NNMCAB Office, 1660 Old Pecos Trail, Suite B, Santa Fe, New Mexico, 87505.**

20  ***Reference documents listed in the Appendix section of these minutes may be requested**

21 **for review at the CAB office in Santa Fe. (505) 989-1662.**

REPORT FROM THE CHAIR

NORTHERN NEW MEXICO CITIZENS ADVISORY BOARD

30 NOVEMBER 2011 BOARD MEETING

ESPANOLA, NEW MEXICO

1. Routine Chair Activities since last NNM CAB meeting on 9-28-11:

a. Executive Committee meeting on 10-12-11:

1. The committee discussed the status of the Recommendations response tracking sheet. It was agreed that the current system is adequate for the present.
2. The agenda for the 11-30-11 CAB meeting was discussed and approved.
3. The recruitment and appointments of new members was discussed.
4. The process for election of Committee officers was discussed and it was agreed to delay elections until after the 2012 New Year. Current officers will continue on until then.
5. A list of proposed future presentations to CAB was discussed and approved.
6. Draft Recommendation 2011-06 was discussed, and after much debate, the Excom decided to support bringing the revised version back into discussion and possible vote if the NNM CAB members at the combined WM and EMSR Committees meeting in the afternoon represented a quorum of CAB members. The published agenda for the combined committees meeting included this as an agenda item.

b. Supported the WM/EMSR Joint Committee meeting on 10-12-2011. Details are in the committee meeting minutes. The main activities were:

- 1) A discussion of draft Recommendation 2011-06, Utilization of LANL as a Screening Lab for Certain "Greater Than Class C Low-Level Radioactive Wastes Prior to Disposal at the WIPP Repository". With a NNM CAB quorum of nine members present, the recommendation was opened for discussion, and after minor editorial changes, a vote was called. There were three "no" votes, so the recommendation did not receive the 75% approval requirement of those present and voting. There was some confusion on the votes at the time, which resulted in an initial recording of approval, and the recommendation was forwarded to Mr. Edelman at the DOE. Subsequent review showed that the "no" votes were based on procedural concerns and not a disagreement with the content of the recommendation, so a decision was made by the Chair to bring the recommendation to the table again at the 11-30-2011 CAB meeting and re-affirm through re-vote of all CAB members present the final

disposition of this recommendation. Appropriate DDFOs and DOE personnel have been informed of this action.

2) A presentation by D. Katzman of LANL on an Alternative Buckman Well Monitoring Plan and a presentation by B. Robinson of LANL on Colloidal Transport. Both were excellent.

c. The Vice Chair and a group of the new and many current CAB members participated in a tour of the WIPP facility on 11-8-11. Menice did the coordination. The tour was successful, informative and the reports were that everyone found it very educational. We will hear any individual comments on the trip at the 11-30-11 CAB meeting.

2. SSAB Related Chair Activities since last NNM CAB meeting on 9-28-11:

a. DOE/HQ sponsored a SSAB Chairs Teleconference call on 10-20-2011 in lieu of the Fall Chairs Meeting. Menice, Karen, Carlos Valdez (Vice Chair), Robert Gallegos, Nick Maestas, Manuel Pacheco and the Chair were in attendance at the LASO HQ conference room. DOE/EM senior staff provided briefings on EM organization (by David Huizenga, the new EM-1), budget, waste disposition and Asset Revitalization. The Chairs presented their local board priorities and accomplishments. The minutes and slides will be available on the EM website.

3. Other Related Chair Activities

a. On 11-9-2011, the Chair attended the official groundbreaking ceremony for the Solar Plant and Smart Grid Demonstration Project at the Los Alamos former landfill site. This is a joint project involving Los Alamos County, NM State, LANL and NEDO (New Energy Development Office, a Japanese research organization). Many other Japanese companies are involved. This is significant to DOE ER efforts and to the CAB because this is the first site in the US to participate in the Asset Revitalization Program. The CAB should be able to learn more about the use of dirt caps as restoration remedies, and how they are controlled in the legacy management plans. A description of the project from ECA is attached.

b. As reported previously, the Chair was invited to participate in the annual Federal Facility Cleanup Dialog meeting hosted by EPA in Washington, DC on September 21-22, 2011. A summary of this dialog meeting has been provided for comments by the attendees, and will be published on the DOE/EM website after November 30, 2011.

Submitted by:

Ralph Phelps

Chair, NNM CAB

11-18-2011

Northern New Mexico Citizens' Advisory Board
Executive Director's Report
November 30th, 2011

Board Membership: The NNM CAB is currently comprised of 16 members. Two site appointments have been made to fill Robert Gallegos' and Gerry Maestas' seats. Those new members are Joseph Tiano and Bonnie Lucas. The DDFOs and I have interviewed several applicants. I have prepared a nomination packet adding four new members to the NNM CAB. Deb Shaw and Mike Loya have also been nominated for re-appointment. Pam Gilchrist's last day on the NNM CAB was Nov. 15th. The new appointments should be made in spring 2012.

Executive Committee Meetings: The Committee met on October 12th. The committee heard reports from the Chair and Vice-Chair, Committee Chairs, Co-DDFOs and Executive Director. The committee reviewed the NNM CAB recommendation tracking sheet, the recruitment of new members and the election of committee Chair and Vice-Chair for 2012. The ExCom also discussed tabled Recommendation 2011-06.

Board Meeting Preparations: I prepared the Final Agenda for the Nov. 30th Board Meeting and submitted the notice to *The Federal Register* on Oct. 14th, in compliance with the Federal Advisory Committee Act. I made all arrangements at the Ohkay Owingeh Conference Center and I submitted a letter of invitation to Governor Lovato to deliver a welcome to the NNM CAB. All meeting materials were copied and collated by Grace Roybal and meeting packets were mailed out on Nov. 23rd. An advertisement for the meeting was placed in *The Rio Grande Sun* by Grace Roybal and on the NNM CAB website.

EM Site-Specific Advisory Board Chairs' Meeting (VTC meeting on Oct. 20th): In lieu of a Fall Chairs' meeting this year, a video conference was held on Oct. 20th at the Los Alamos Site Office. Acting EM-1, David Huizenga spoke, along with Joann Luczak giving a budget presentation, Frank Marcinowski giving a Technical and Regulatory Support update and Marty Letourneau giving a Waste Management Update. Each site presented its "Top Three Issues and Accomplishment". The Spring Chairs' meeting is scheduled in April and will be hosted by the Paducah CAB. NNM CAB members Ralph Phelps, Carlos Valdez and Nick Maestas and staff member Karen Erickson attended the VTC.

Outreach: Forty-two (42) recruitment letters went out in October to elected officials, civic groups, environmental groups and Pueblo Governors requesting that they submit a nomination to the NNM CAB. The Mayor of Angel Fire will be submitting a nomination and the Rotary Club of Los Alamos has submitted a formal nomination and has been nominated for appointment. I will continue our recruitment and will especially concentrate on recruiting members from the surrounding pueblos and young people from our local colleges and universities. If you know of anyone who might be interested, I would appreciate your help in recruiting that person. Thank you to Carlos and to Nicole for nominating excellent candidates!

WIPP Tour: NNM CAB members, DDFOs and staff toured the WIPP Repository on Nov. 8th. The tour was excellent and the staff at the Carlsbad Field Office was very accommodating.

NNM CAB Office Move: The NNM CAB office in Pojoaque is presently under renovation and is scheduled to open in January.

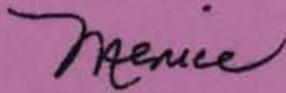
Office Management: Office space in Pojoaque has been identified for the NNM CAB office and

LANL Reading Room. Grace Roybal and I have been assisting with projected costs for utilities, office equipment, etc. The staff supported all committee meetings with preparation of notices, agendas and committee minutes.

Karen Erickson has created a Face book Page for the NNM CAB. You are invited to "friend" the NNM CAB's Face book Page and submit photos and updates to Karen. She will be preparing meeting minutes, updating the NNM CAB website and preparing NNM CAB Newsletters and the Annual Report. She may be reached at: Karen.Erickson@nnsa.doe.gov or at 505-988-1749.

Next Board Meeting: January 25, 2012
New NNM CAB Office
Pojoaque, NM

Respectfully submitted,



Menice B. Santistevan
Executive Director

Northern New Mexico Citizens' Advisory Board

2012 Board Meeting Schedule

DRAFT

January 25, 2012

**NNMCAB Office
Pojoaque**

March 28, 2012

**Albuquerque
TBD**

May 30, 2012 (Annual Workshop)

**The Lodge
Santa Fe**

July 25, 2012

**Los Alamos
Best Western Hotel
Hilltop House**

September 26, 2012

**Taos
Sagebrush Inn and
Conference Center**

November 28, 2012

**Ohkay Owingeh
(San Juan Pueblo)**

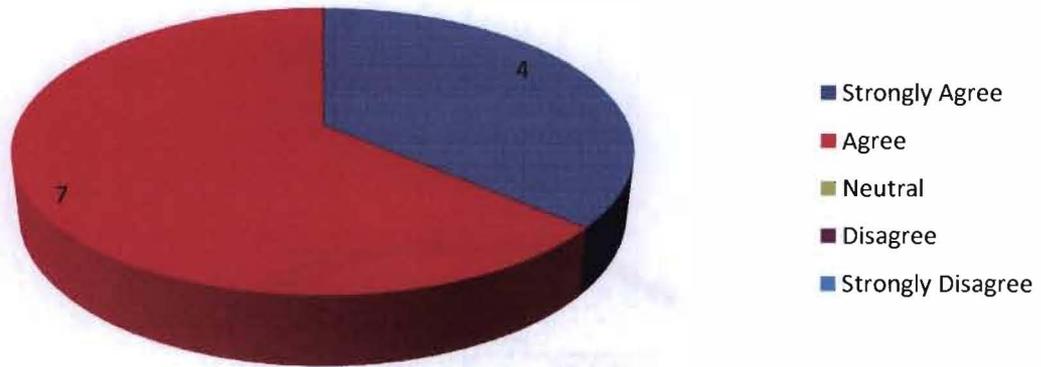
Northern New Mexico Citizens' Advisory Board

2011 Annual Self-Evaluation Results



November 30, 2011

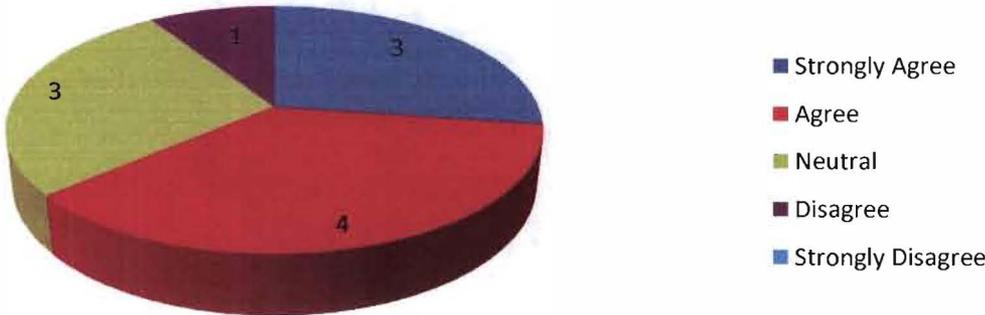
The NNM CAB is focusing on the appropriate Environmental Management issues at and around the Los Alamos site.



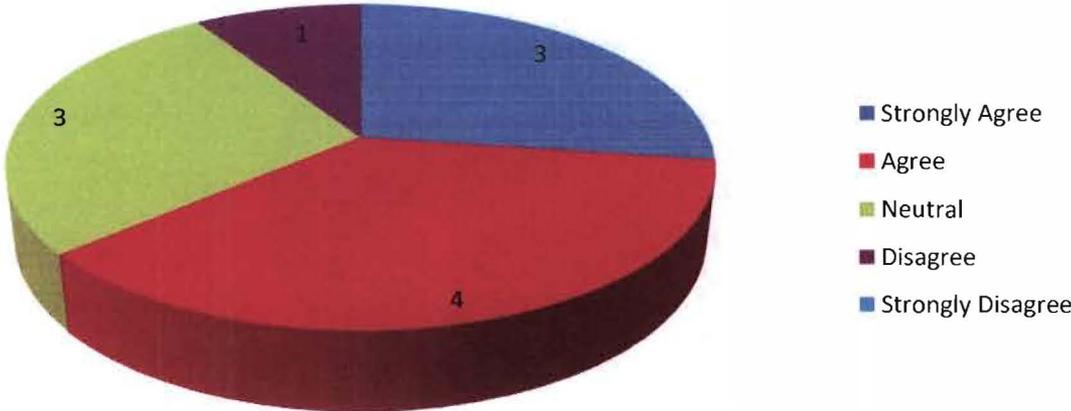
The recommendations made by the NNM CAB are resulting in measurable changes to improve environmental management activities at and around the Los Alamos site.



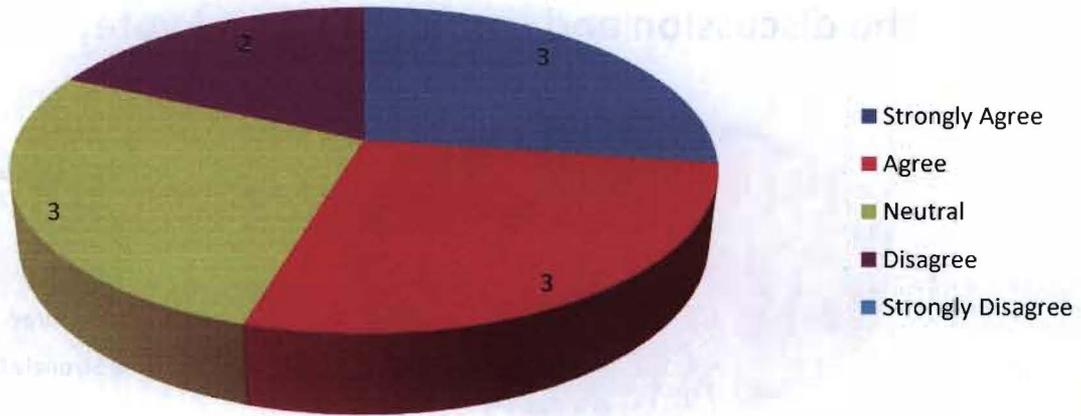
The NNM CAB spends the right amount of time developing, reviewing and discussing recommendations and I am comfortable with the discussion and confident when I vote.



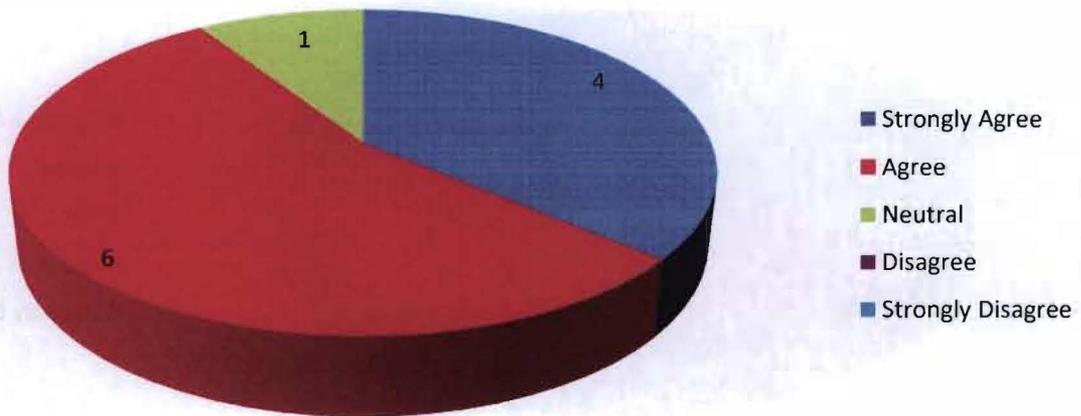
I feel my views and participation are valued by other NNM CAB members.



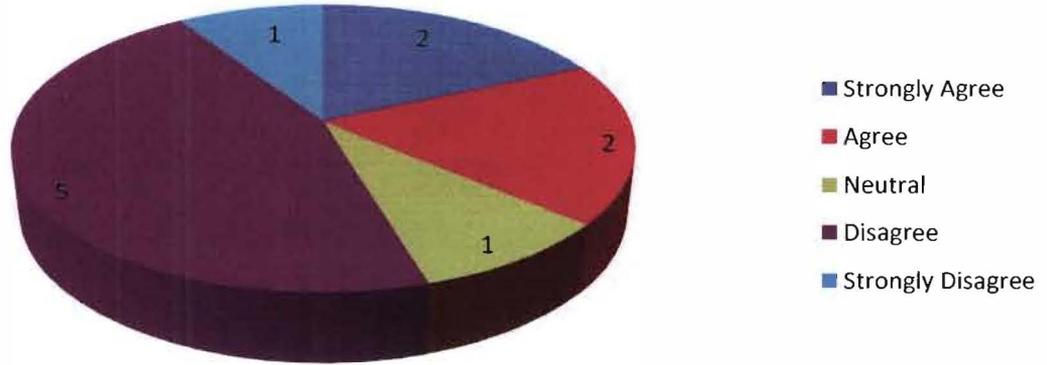
I am satisfied with the level of participation and involvement of the other NNM CAB members.



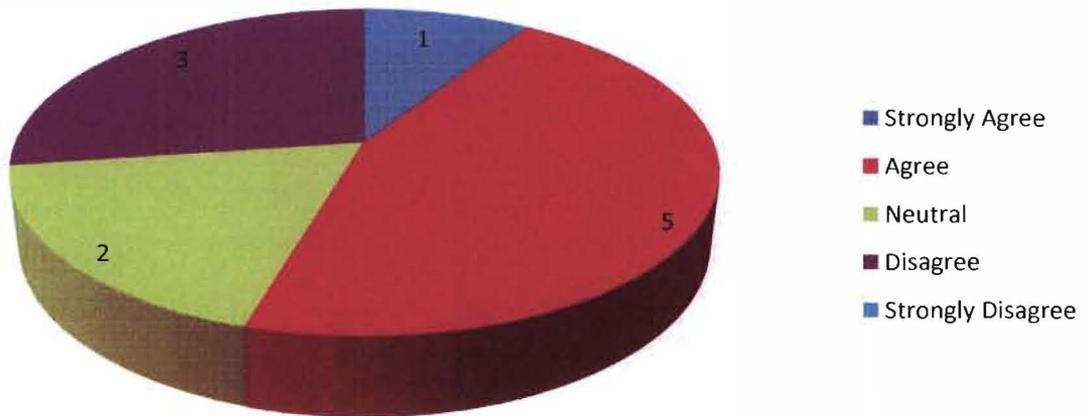
I get all the information I need to understand issues and feel as though I'm kept "in the loop."



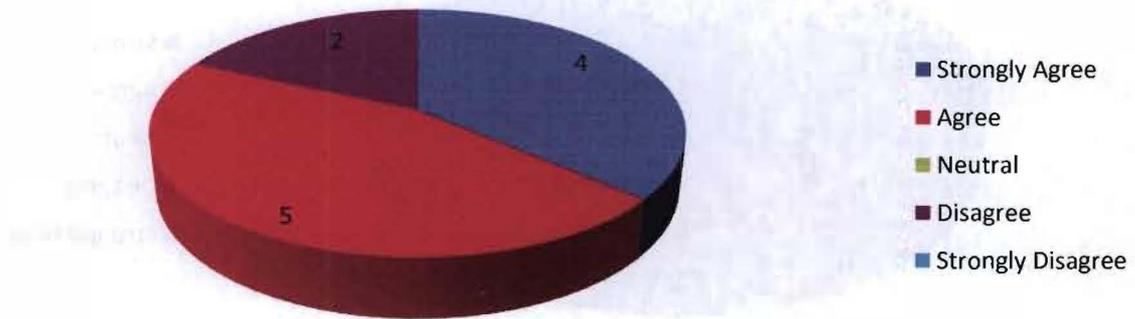
I get too much information in the mail and through emails and I am not sure what I should focus on.



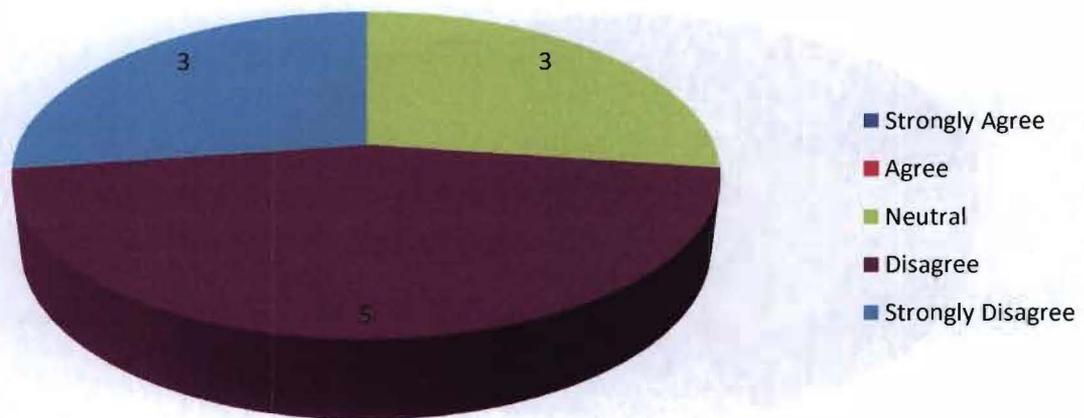
The NNM CAB does a good job of getting its message out to the public.



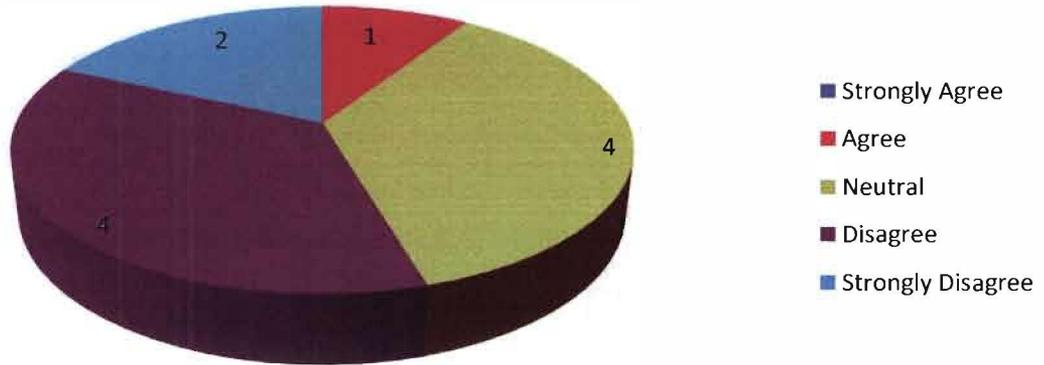
The location and scheduling of board meetings and committee meetings allows for full participation from the NNM CAB members and the public.



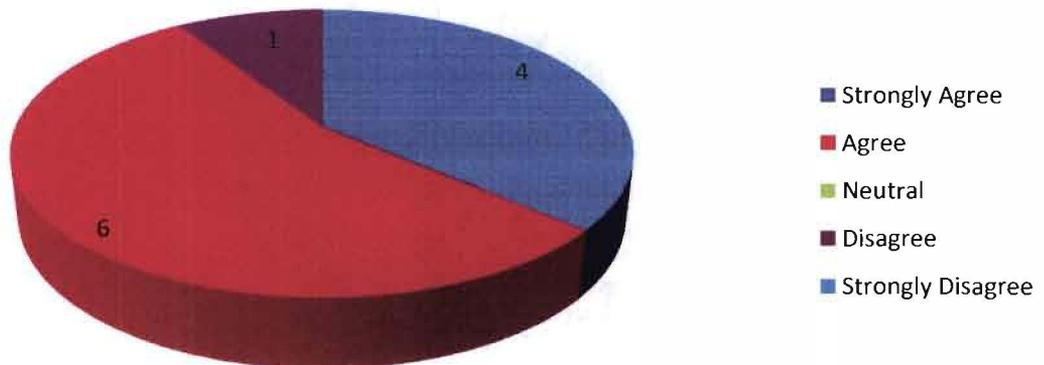
I think our membership process is restrictive and needs to be changed.



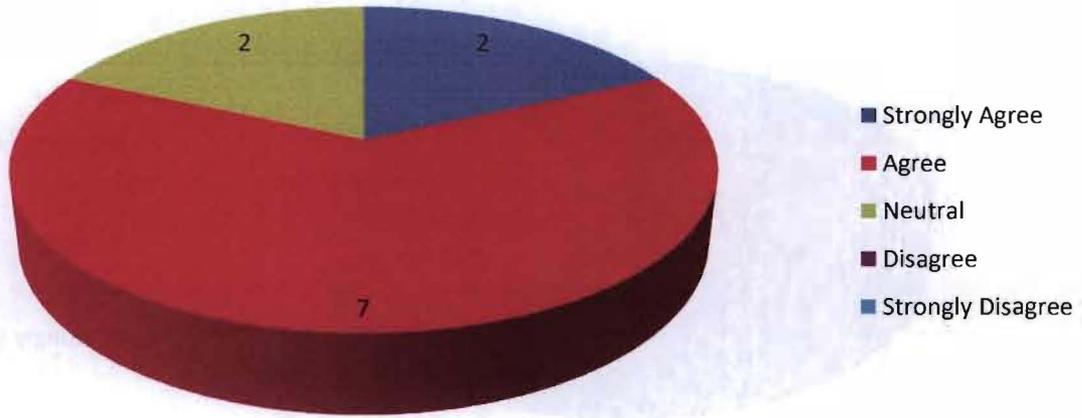
The current organizational structure (e.g., committees) of the NNM CAB needs to be changed.



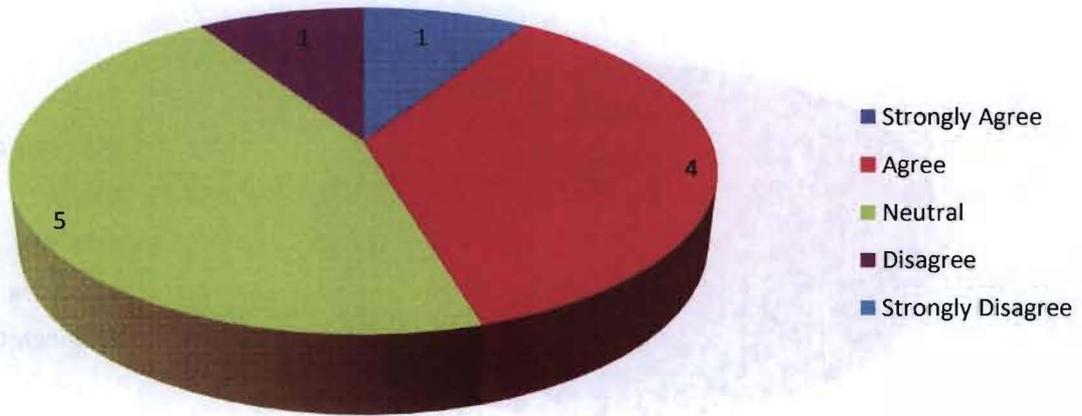
The support provided to the NNM CAB (technical, facilitation and administrative) is at the right level and in the right areas.



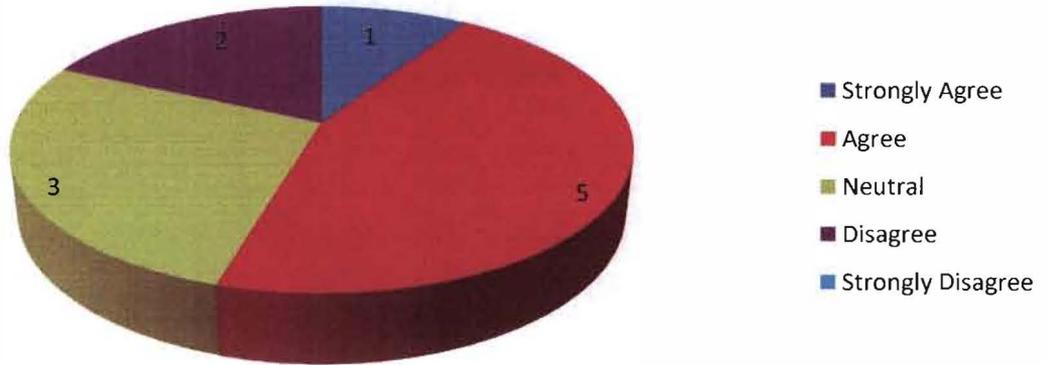
Responses from DOE to NNM CAB requests for information have been timely and responsive.



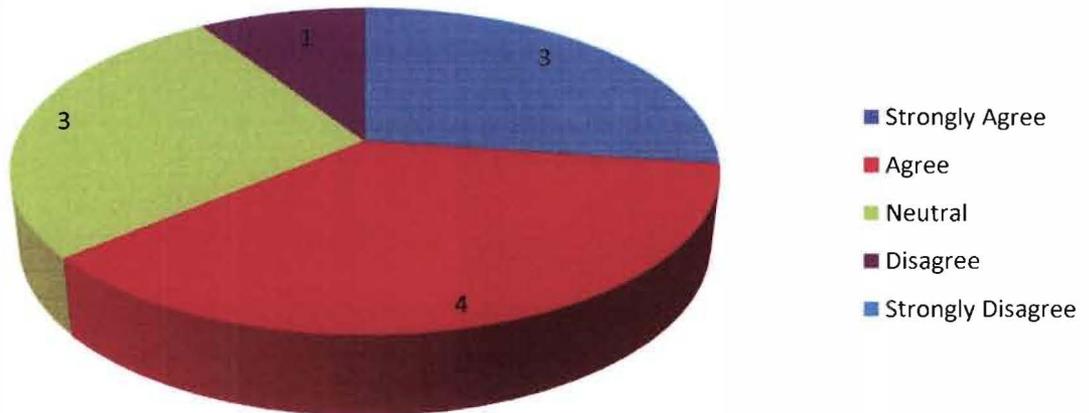
Responses from DOE regarding NNM CAB recommendations have been timely.



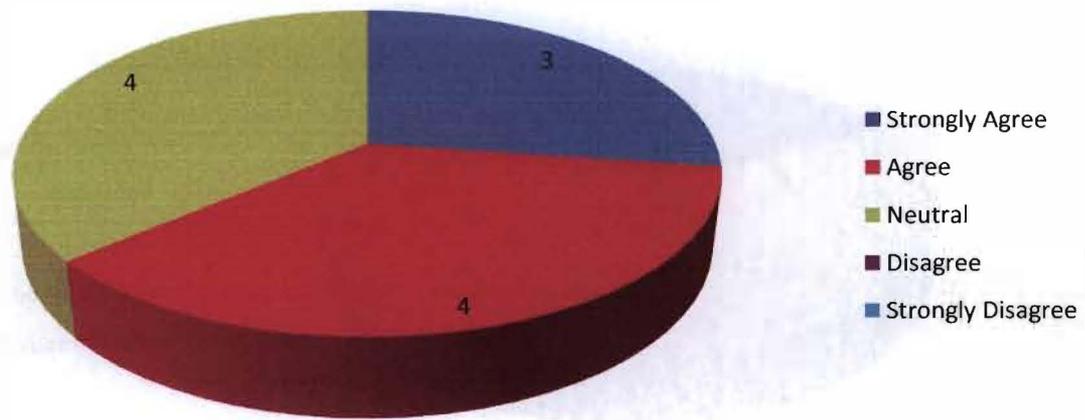
Responses from DOE regarding NNM CAB recommendations have included adequate information.



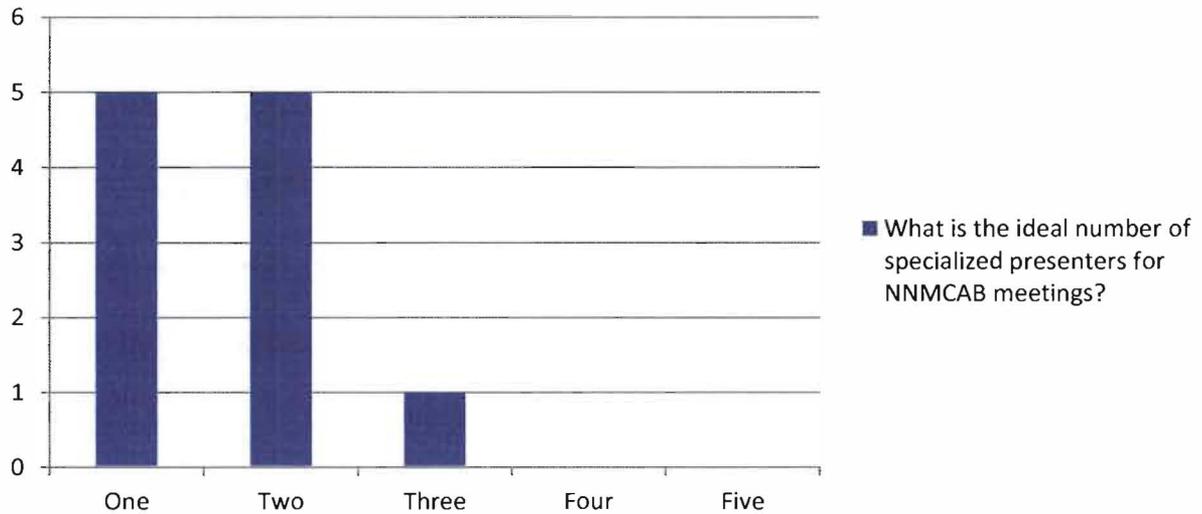
Do you think the NNM CAB should keep committee meetings combined?



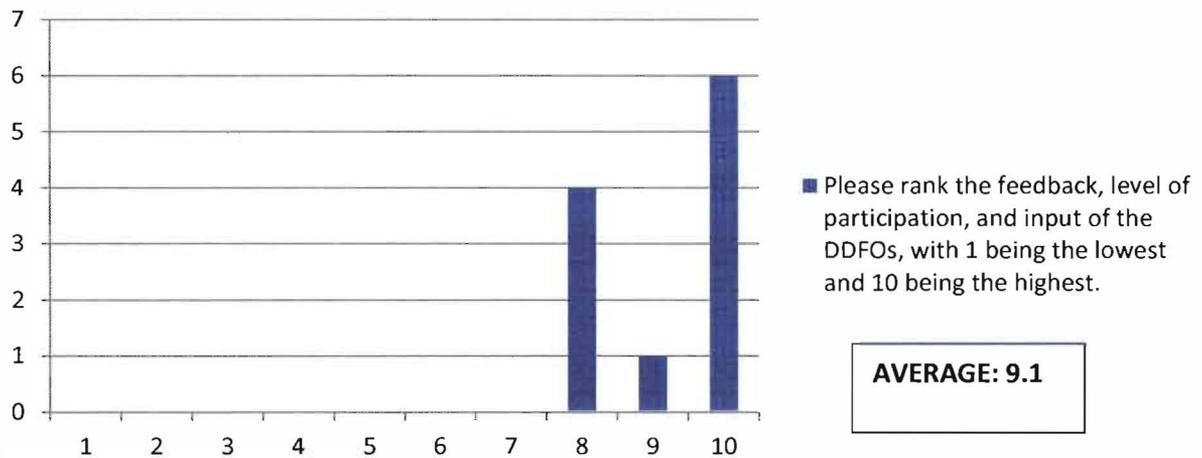
I feel the reading material should be in synopsis form.



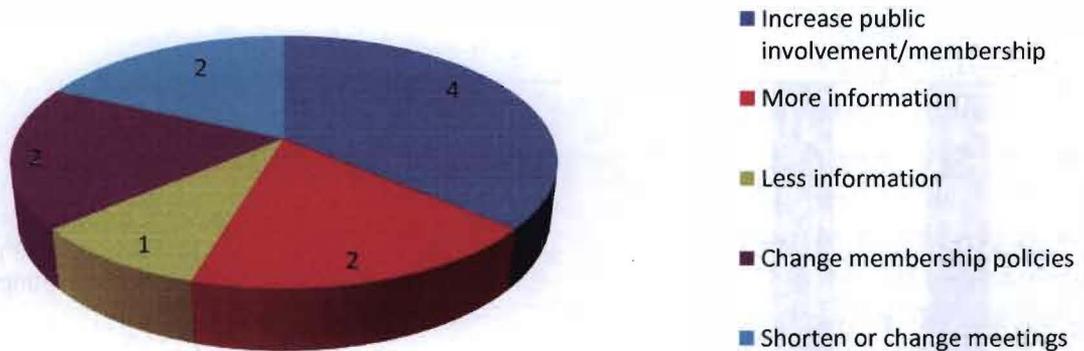
What is the ideal number of specialized presenters for NNM CAB meetings?



Please rank the feedback, level of participation, and input of the DDFOs, with 1 being the lowest and 10 being the highest.



If I could make one change to the NNM CAB it would be:



Right now, I would not make any changes, but continue on with the initiative to bring membership up closer to our authorized limit.

Less information. To do the job properly would be full time. The use of volunteers is stretched beyond most people's use of time.

Looking at proposed future use and anticipating future cleanup work based on future use.

More field trips for board members

Do not have term limits. Allow members to serve as long as they want, but have a mechanism to remove members if necessary.

No suggestions

1) Increase membership; 2) Develop a list of areas that might merit a recommendation; 3) A different way to obtain new members.

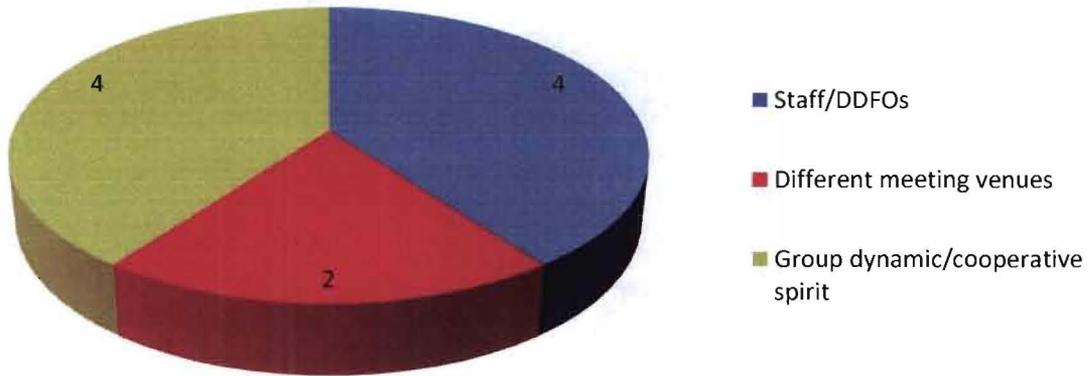
More meetings in Los Alamos, Taos, and even Albuquerque, to increase awareness in those areas.

The time for the CAB meetings are too long and should be condensed.

More public support and involvement

Seek more public participation; get more direct education on the very specific issues being decided on at the moment.

If there were one thing I would definitely NOT change with the NNM CAB it would be:



The interpersonal dynamics of the current membership

The different venues - this is definitely a good change.

The conviviality

We have the best support staff and federal delegation. I would definitely not change that.

The staff and the DDFOs

Having meetings in different cities/sites in northern NM

The comradeship attitude that currently exists

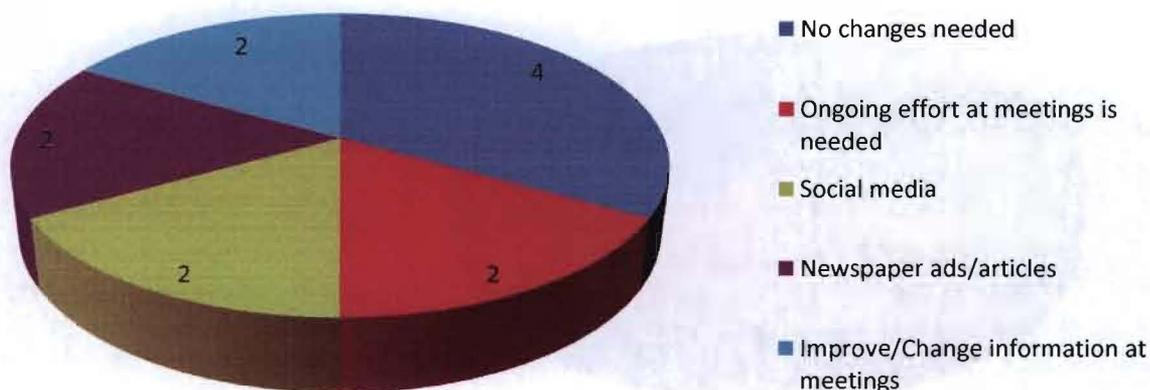
STAFF. They have excellent follow-through with updates, information and do a great job in organizing the group meetings.

The nice support staff; they are very helpful and make things move smoothly.

The current members of the CAB

Not qualified to answer

How do you feel public awareness can be improved in 2012?



Continue with our presentations to local groups, increase visibility of new office location

Perhaps, depending on how it goes on 11/30, have more opportunity for NGOs to address specific EM concerns.

Maybe we can start inviting media to our meetings. Maybe we can open up a Facebook profile and post what's going on with the CAB.

Sidewalk barkers! The public is aware of what the public wants to be aware of.

Try advertising in area papers at least two weeks before scheduled meetings. Invite newspaper reporters considered friendly/fair to meetings.

By including "public awareness" as a topic for all meetings. We could get a public awareness specialist included in our meetings.

SOCIAL MEDIA and links to Facebook on the official website that lets FB users see regular updates for meetings and relevant articles of importance.

We need to stop the alarmists from presenting data that is not vetted, and need to be more even-handed. There has to be a fair and balanced approach. The financial effect has a serious downside and has to be brought into the equation; the effects are already affecting the economy in NNM, as projects are being stopped from being brought online. For the majority of these anti-lab people do not depend on the financial effects of the Lab and the subcontractors for their livelihood. There is a tremendous amount of negativism being spread by ill-informed people which nullifies our efforts to inform the citizens.

This is a hard subject because the current team in my opinion has done an excellent job in "getting the word out."

I would like to explore this cumulatively with the Board

Other comments:

We need to continue our appreciation for the contributions and efforts of all our members at every meeting.

Most of the significant decisions are made in the executive committee meetings (maybe wrong but I have the impression that if I don't go to the executive meetings, I don't know what is happening).

Since I am a very new member of the CAB it's hard to give a fair and knowledgeable answer to many of these questions!

I am more optimistic (than I have ever been since joining the NNM CAB) about the advancement in the clean-up process now that there is a new governor and administration in Santa Fe. Monies will now go to the actual clean-up and there will be progress because they are working together with the EM people to get the facility cleaned up. Repeat: The financial effect has a serious downside and has to be brought in to the equation; the effects are already affecting the economy in NNM, as projects are being stopped from being brought online. The Martinez Administration is working to change this and make things happen. That is how we will improve the total outlook in 2012.

1 The Draft EIS states that the disposal facility must be capable of receiving wastes in 2018
2 and that the total volume of early GTCC LLRW and GTCC-Like wastes is described as a pile
3 that when placed on a football field (360 ft length x 160 ft width) would have a height of 7.1 ft.
4 The early wastes would consist of three waste types: (1) activated metals, (2) sealed sources, and
5 (3) other wastes. Activated metals are principally solid structures and hardware from
6 decommissioning of nuclear reactors and are a source of stable irradiated metals with known
7 activation and fission product radio-nuclides with known radioactive half-lives. The Type 1
8 wastes would require less stringency in meeting disposal requirements. Although, in later years,
9 the wastes from advanced design nuclear reactors (fission induced fusion, etc.) may present
10 much greater challenges. The same level of stability cannot be assigned to the second and third
11 waste types because these sources will change in time to more advanced technical sources with,
12 perhaps, new and greater levels of radioactivity to meet futuristic national security and defense-
13 related needs including classified sources for detection or IEDs. Whereas, activated metals could
14 be disposed of in borehole facilities, near-surface trenches, or the WIPP, the only facility that
15 would meet the requirements for waste types 2 and 3 would be deep geologic burial as in the
16 WIPP. But even the type 2 and 3 wastes designated for deep geologic disposal would need to be
17 screened to assure that pressurized sources, sources with developed explosives, highly toxic or
18 hazardous sources, or highly unstable sources or any of the aforementioned sources that could
19 be used by terrorists as Improvised Explosive Devices (IEDs) or other radiological dispersal
20 devices should not be sent directly to the WIPP but to a screening facility or laboratory with the
21 capability of neutralizing or destroying such sources before final shipment to the WIPP. The
22 screening facility or laboratory would not store or dispose of any source but eventually ship all
23 neutralized sources to the WIPP. LANL has been this type of screening facility as part of the
24 Off-Site Source Recovery Program for many years and has not experienced a source that was not
25 treatable. Further, it is expected that the screening facility would be capable and funded for
26 developing treatments for all future sources.

27 Considering the foregoing discussion, it appears that the WIPP is the only operating
28 facility that could handle the anticipated volume of GTCC and GTCC-Like waste without much
29 modification and within the allotted time-frame.
30

31 **Comments and Observations on Historical and Cultural Impacts:**

32 The U.S. since World War II has depended on and funded New Mexicans and NM
33 Laboratories to provide manpower and technical facilities to help in wartime, cold-war and now
34 terror-driven threats to our infrastructure as evidenced by the numerous veterans and survivors
35 from the Bataan Death March, Navajo Code Talkers, and Pacific island invasions. Los Alamos
36 National Laboratory was chosen to develop nuclear weapons to end WW-II including testing at
37 the Trinity site, which it did, and continued to use advanced methodologies to protect our troops
38 during the Korean conflict, Vietnam War, Cold War and now Middle East conflicts and terrorist
39 threats. All these wars and conflicts have resulted in nuclear or hazardous wastes that require
40 cleanup of these defense-based wastes. The WIPP located near Carlsbad, NM is another
41 example of a NM- based facility that has stepped up to dispose of defense related wastes and its
42 proximity is certainly advantageous to LANL. This country depends on NM and LANL to
43 cleanup defense-related wastes and LANL could eventually be the sole remaining screening
44 facility that has the technical capability to do this cleanup with innovative and advanced
45 technologies.
46

1 **Recommendations:**

2 **No.1.** The NNM CAB has previously recommended in our Recommendation 2011-05 dated 12
3 May 2011 that, while LANL should not be considered for the disposal of GTCC wastes, that the
4 WIPP repository be considered for disposal of GTCC and GTCC-Like wastes because it is an
5 operating facility that has already successfully completed all requirements for such a repository
6 and will eliminate the need for re-doing expensive and time consuming and extensive regulatory
7 and testing processes. Based on the need for an appropriate screening facility for certain GTCC-
8 like wastes, the NNM CAB now recommends that WIPP be considered the priority site for
9 disposal.

10 **No.2.** That a screening facility be established or designated at LANL for screening/neutralizing
11 applicable type 2 and 3 wastes to preclude shutting down the WIPP site every time a hazardous
12 waste form or waste form that does not meet established criteria is unexpectedly or mysteriously
13 received.

14
15 **Intent:**

16 The intent of this recommendation is for DOE to designate the WIPP as the preferred site
17 for disposal of GTCC and GTCC-Like waste and to establish LANL as a screening site for
18 certain Waste Type 2 and 3 wastes to prevent unanticipated and intermittent shut down of a main
19 disposal facility, especially for hazardous or unstable futuristic wastes that do not meet
20 established waste criteria.

21 It would be appropriate to lessen the need of a screening laboratory in time so that a
22 greater volume of waste could be shipped directly to the WIPP.

23
24
25 **References:**

- 26 1. NNM CAB Recommendation 2011-05, approved May 12, 2011
27 2. Test Plan for the Actinide Source-Term Waste Test Program (STTP) 1993; Document
28 No: CLS1-STP-SOP 5-0120, Robert Villarreal and L. Phillips.
29 3. Draft Environmental Impact Statement for the Disposal of Greater-than Class C (GTCC)
30 Low-Level Waste and GTCC-Like Waste (DOE/EIS-0375-D) Feb. 2011, Arnold Edelman EIS
31 Document Manager, USDOE.
32

This fact sheet answers the most frequently asked health questions (FAQs) about trichloroethylene. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. This information is important because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Trichloroethylene is a colorless liquid which is used as a solvent for cleaning metal parts. Drinking or breathing high levels of trichloroethylene may cause nervous system effects, liver and lung damage, abnormal heartbeat, coma, and possibly death. Trichloroethylene has been found in at least 852 of the 1,430 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is trichloroethylene?

Trichloroethylene (TCE) is a nonflammable, colorless liquid with a somewhat sweet odor and a sweet, burning taste. It is used mainly as a solvent to remove grease from metal parts, but it is also an ingredient in adhesives, paint removers, typewriter correction fluids, and spot removers.

Trichloroethylene is not thought to occur naturally in the environment. However, it has been found in underground water sources and many surface waters as a result of the manufacture, use, and disposal of the chemical.

What happens to trichloroethylene when it enters the environment?

- ❑ Trichloroethylene dissolves a little in water, but it can remain in ground water for a long time.
- ❑ Trichloroethylene quickly evaporates from surface water, so it is commonly found as a vapor in the air.
- ❑ Trichloroethylene evaporates less easily from the soil than from surface water. It may stick to particles and remain for a long time.
- ❑ Trichloroethylene may stick to particles in water, which will cause it to eventually settle to the bottom sediment.
- ❑ Trichloroethylene does not build up significantly in

plants and animals.

How might I be exposed to trichloroethylene?

- ❑ Breathing air in and around the home which has been contaminated with trichloroethylene vapors from shower water or household products such as spot removers and typewriter correction fluid.
- ❑ Drinking, swimming, or showering in water that has been contaminated with trichloroethylene.
- ❑ Contact with soil contaminated with trichloroethylene, such as near a hazardous waste site.
- ❑ Contact with the skin or breathing contaminated air while manufacturing trichloroethylene or using it at work to wash paint or grease from skin or equipment.

How can trichloroethylene affect my health?

Breathing small amounts may cause headaches, lung irritation, dizziness, poor coordination, and difficulty concentrating.

Breathing large amounts of trichloroethylene may cause impaired heart function, unconsciousness, and death. Breathing it for long periods may cause nerve, kidney, and liver damage.

ToxFAQs™ Internet address is <http://www.atsdr.cdc.gov/toxfaq.html>

Drinking large amounts of trichloroethylene may cause nausea, liver damage, unconsciousness, impaired heart function, or death.

Drinking small amounts of trichloroethylene for long periods may cause liver and kidney damage, impaired immune system function, and impaired fetal development in pregnant women, although the extent of some of these effects is not yet clear.

Skin contact with trichloroethylene for short periods may cause skin rashes.

How likely is trichloroethylene to cause cancer?

Some studies with mice and rats have suggested that high levels of trichloroethylene may cause liver, kidney, or lung cancer. Some studies of people exposed over long periods to high levels of trichloroethylene in drinking water or in workplace air have found evidence of increased cancer. Although, there are some concerns about the studies of people who were exposed to trichloroethylene, some of the effects found in people were similar to effects in animals.

In its 9th Report on Carcinogens, the National Toxicology Program (NTP) determined that trichloroethylene is "reasonably anticipated to be a human carcinogen." The International Agency for Research on Cancer (IARC) has determined that trichloroethylene is "probably carcinogenic to humans."

Is there a medical test to show whether I've been exposed to trichloroethylene?

If you have recently been exposed to trichloroethylene, it can be detected in your breath, blood, or urine. The breath test, if it is performed soon after exposure, can tell if you have been exposed to even a small amount of trichloroethylene.

Exposure to larger amounts is assessed by blood

and urine tests, which can detect trichloroethylene and many of its breakdown products for up to a week after exposure. However, exposure to other similar chemicals can produce the same breakdown products, so their detection is not absolute proof of exposure to trichloroethylene. This test isn't available at most doctors' offices, but can be done at special laboratories that have the right equipment.

Has the federal government made recommendations to protect human health?

The EPA has set a maximum contaminant level for trichloroethylene in drinking water at 0.005 milligrams per liter (0.005 mg/L) or 5 parts of TCE per billion parts water.

The EPA has also developed regulations for the handling and disposal of trichloroethylene.

The Occupational Safety and Health Administration (OSHA) has set an exposure limit of 100 parts of trichloroethylene per million parts of air (100 ppm) for an 8-hour workday, 40-hour workweek.

Glossary

Carcinogenicity: The ability of a substance to cause cancer.

CAS: Chemical Abstracts Service.

Evaporate: To change into a vapor or gas.

Milligram (mg): One thousandth of a gram.

Nonflammable: Will not burn.

ppm: Parts per million.

Sediment: Mud and debris that have settled to the bottom of a body of water.

Solvent: A chemical that dissolves other substances.

References

This ToxFAQs information is taken from the 1997 Toxicological Profile for Trichloroethylene (update) produced by the Agency for Toxic Substances and Disease Registry, Public Health Service, U.S. Department of Health and Human Services, Public Health Service in Atlanta, GA.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs™ Internet address is <http://www.atsdr.cdc.gov/toxfaq.html>. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.



Department of Energy

Washington, DC 20585

November 4, 2011

Mr. Ralph L. Phelps
Chairman
Northern New Mexico Citizens' Advisory Board
1660 Old Pecos Trail, Suite B
Santa Fe, New Mexico 87505

Dear Mr. Phelps:

Thank you for the Northern New Mexico Citizen's Advisory Board Recommendation No. 2011-09, regarding the removal of above ground transuranic (TRU) waste from the Los Alamos National Laboratory (LANL) Material Disposal Area G.

The Office of Environmental Management and the National Nuclear Security Administration (NNSA) agree that the removal of above ground TRU waste at LANL is a priority. We had a meeting on September 13, 2011, with the Governor and the Secretary of the New Mexico Environment Department, both of whom consider cleanup for LANL a priority. The meeting included discussions on the importance of removing the TRU waste and the impacts that potential Federal funding cuts could have on this initiative. It was agreed that additional meetings and discussions would occur between the Department of Energy and the State of New Mexico.

We look forward to continuing our discussions with the state officials and will provide periodic updates to the Board on these discussions. If you have further questions, please feel free to contact Ms. Melissa Nielson, Director, Office of Public and Intergovernmental Accountability, at (202) 586-0356 or Ms. Cate Alexander, Designated Federal Officer for the EM SSAB at (202) 586-7711.

Sincerely,

A handwritten signature in black ink, appearing to read "Frank Marcinowski".

Frank Marcinowski
Deputy Assistant Secretary for
Technical and Regulatory Support

