



Northern New Mexico Citizens' Advisory Board Meeting
January 27, 2010
1:00 p.m. to 8:00 p.m.
Holiday Inn, 4048 Cerrillos Road
Santa Fe, New Mexico
MINUTES

Attending:

NNMCAB Members-

1. Ralph Phelps, NNMCAB Chair
2. Pam Henline, EMSR Committee Chair
3. Deb Shaw, EMSR Committee Vice Chair
4. Gerry Maestas, WM Committee Chair
5. Mike Loya, WM Committee Vice Chair
6. J.D. Campbell
7. Pamela Gilchrist
8. Jacqueline Gutierrez
9. Lawrence Longacre
10. Manuel Pacheco
11. Bob Villarreal

Excused Absences-

1. Robert Gallegos, NNMCAB Vice Chair
2. Caroline Mason

Absent-

1. Robert Misener

NNMCAB Staff-

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

Also in Attendance-

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

Guests-

Rich Mayer, EPA Region 6
Fred deSousa, LANS

NNMCAB Meeting Minutes 1-27-10
Board Approved & Certified by Chair, Mr. Ralph Phelps

Paul Miskimin, Winning Ways International
Julian Boyance, Energy Solutions
John Lujan, Public
Dan Pava, LANL/ENV
Bob Gilkeson, Public
Hai Sherr, LASO
Kay Lynnes, LANL
Dave McInroy, LANS
Nancy Werdel, DOE/LASO
Pete Maggiore, North Wind/NC

AGENDA

- I. Call to Order**
 - II. Establishment of Quorum (8 needed)**
 - a. Roll Call**
 - b. Excused Absences**
 - III. Welcome and Introductions**
 - IV. Approval of Agenda**
 - V. Approval of Minutes of November 18, 2009**
 - VI. Public Comment Period**
 - VII. Old Business**
 - a. Written Reports**
 - b. Other Items**
 - VIII. New Business**
 - a. Matters from Deputy Designated Federal Officers**
 - IX. Open Forum for Members**
 - X. Presentation 1. Status of Corrective Actions, with Dave McInroy, LANS**
 - XI. Public Comment Period**
 - XII. Consideration of Recommendations to the Department of Energy**
 - Draft Recommendation 2010—01, Disposition of Remote Handled Waste Buried in 33 Shafts at Technical Area 54**
 - XIII. Presentation 2. Natural Resource Damage Assessment, with Nancy Werdel, DOE)**
 - XIV. Meeting Feedback and Adjournment**
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MINUTES

I. Call to Order, DDFO Introductions

The regular bi-monthly meeting of the Northern New Mexico Citizens' Advisory Board (NNMCAB or CAB) meeting was held on January 27, 2010 at the Holiday Inn, 4048 Cerrillos Road in Santa Fe, New Mexico. The Chair, Ralph Phelps presided. Ed Worth, Co-Deputy Designated Federal Officer (DDFO) stated that on behalf of the Department of Energy (DOE), the regular bi-monthly meeting of the NNMCAB was called to order at 1:00 p.m. The regular meeting of the NNMCAB was open to the public and posted in ***The Federal Register*** in accordance with ***The Federal Advisory Committee Act***. Mr. Worth welcomed everyone to the meeting and thanked the members for volunteering their time. He expected the meeting to be a good one with two presentations, one on the status of corrective actions with Mr. Dave McInroy, LANS and the second on Natural Resource damage Assessment with Ms. Nancy Werdel, DOE.

II. Establishment of Quorum (8 needed)

a. Roll Call

Ms. Novak conducted roll call as the members arrived. Ms. Gutierrez, Mr. Maestas and Mr. Loya arrived after the meeting was called to order, which made a quorum for conducting business with eleven members present.

b. Excused Absences

Mr. Casalina, DOE Federal Coordinator, had previously approved excused absences for Mr. Robert Gallegos and Ms. Caroline Mason. Mr. Robert Misener was marked absent.

III. Welcome and Introductions

Mr. Ralph Phelps, NNMCAB Chair, asked the members to provide a round robin introduction. Liaison member Mr. Rich Mayer, EPA Region 6, attended the meeting. Ms. Santistevan introduced Mr. John Lujan who joined the meeting as a new CAB nominee. The Fraternal Order of Eagles nominated Mr. Lujan to the DOE for consideration.

IV. Approval of Agenda

The Board reviewed the January 27, 2010 CAB meeting agenda. An amended agenda was handed out to the group that included an additional public comment period. Mr. Phelps called for any comments or additions to the modified agenda. No additional changes were brought forth. Mr. Longacre asked if the board could proceed with business without a quorum present? Mr. Phelps stated the board could proceed to follow the current agenda in good faith and that he would accept a motion for approval as soon as a quorum was counted. Thus, the group followed the current agenda until a quorum was present whereby, **Ms. Henline made a motion to approve the agenda as amended and Dr. Shaw seconded the motion. The meeting agenda was approved.**

V. Approval of Minutes of November 18, 2009

The Board reviewed the minutes from the November 18, 2009 CAB meeting. By ongoing instructions from DOE Headquarters, the minutes were previously reviewed and certified by the NNMCAB Chair. The minutes were distributed in the mailed meeting packet and were presented at the meeting for Board approval.

Mr. Pacheco made a motion to approve the minutes as presented and Mr. Maestas seconded the motion. The minutes were unanimously approved as presented.

VI. Public Comment Period

An early public comment period was scheduled. Mr. Phelps opened the floor for public comment. No one signed up to speak.

VII. Old Business

a. Written Reports.

➤ NNMCAB Chair's Report

A printed copy of the Chairs Report was included in the meeting packet and a copy may be obtained by request from the CAB office at (505) 989-1662. Mr. Phelps asked for questions or comments on the written reports; the intent was for the reports to be submitted in writing and questions could be brought up in this section or later. Mr. Phelps briefly reviewed the main points in his Chair's report.

Mr. Phelps attended the regular meeting of the Executive Committee that met on January 13, 2010. The group discussed LANL's plans to prepare a new Baseline Change Proposal (BCP) for budgets to account for accumulated shortfalls. He would keep the board apprised of any new information, which was germane to the charge of the Budget Ad Hoc Committee.

Mr. Phelps participated in the Site Specific Advisory Board (SSAB) Chairs bimonthly conference call held on January 21, 2010. One significant item he wanted to relay to the board was that when two or more of the sub committees meet it was covered in the SSAB open meetings rules, and should be published in *The Federal Register*, which Ms. Santistevan has already been doing. In addition, any significant issues being discussed by the committees separately needed to be discussed with the full board. The committees can discuss issues but any action taken would need a board quorum, action here meaning primarily letters or recommendations.

Mr. Phelps attended the official start of American Recovery and Reinvestment Act (ARRA) funded building demolition at TA-21 site on December 1, 2009. He noted removal of buildings is necessary to proceed with soil investigations and restoration. Additionally, LANL made a presentation on the status of the Chromium contamination in the aquifer beneath LANL. This was followed by a field tour to Sandia Canyon to view the topography of the wetlands. Mr. Worth thanked members for going on the tour; he thought it was a good meeting.

➤ **NNMCAB Executive Director's Report**

A printed copy of Ms. Santistevan's report was included in the meeting packet and a copy may be obtained by request from the CAB office at (505) 989-1662. Ms. Santistevan reminded the board that the May 12 and 13, 2010 Board Retreat and CAB meeting was scheduled to be held at the Ohkay Owingeh Conference Center in Espanola.

Ms. Santistevan announced that Mr. Matt Madrid, Mr. Paul Martinez and Mr. Peter Baston have resigned from the NNM CAB. Ms. Santistevan was currently recruiting applicants for membership to the NNM CAB. She asked if the Board knew of any Northern New Mexico citizens who may be interested in serving on the NNM CAB, and if so please let her know. She planned to submit a new nomination package by March 2010, with appointments to be expected by the end of April 2010.

Ms. Santistevan and Mr. Phelps agreed to serve on the planning committee for the Spring SSAB Chairs' meeting, which was scheduled for April 27-29, in Oak Ridge, Tennessee. The NNM CAB has agreed to host the fall 2010 SSAB Chairs' meeting in Santa Fe on September 14-16, 2010. Ms. Santistevan has contracted with Hotel La Fonda for the meeting.

Ms. Santistevan's report included information about CAB staff supported activities for committee meetings including travel reimbursements, preparation of notices, agendas, meeting minutes. Additionally, Ms. Novak updates the NNM CAB public web site and the CAB member's site on a weekly basis. She has been working with Headquarters staff to transfer the site from ".org" to a ".gov", which was a new SSAB requirement. HQ would be working with the SSAB to complete this process. Ms. Novak would be responsible for updating the NNM CAB website.

Ms. Santistevan pointed out that there was an updated CAB Directory in the mailed meeting packets. She asked the members to check the contact information and to let Ms. Roybal know if there were any changes needed.

VIII. New Business

a. Matters from Co-DDFOs Ed Worth and Lee Bishop

Requested Presentation Topics:

Mr. Ed Worth provided comments to the Board. He referred to a handout containing a list of presentation topics for the board. The list reflected board member input on priorities for presentations. Mr. Worth asked for board member feedback. The presentation topics are reprinted below:

1. Status of TA-54 (CMEs for MDAs G, H, L, Groundwater, Soil Vapor Extraction Pilot Test)
2. Status of investigation at TA-49 (MDA AB), (Best for after May 2010)
3. Status of MDA C investigation
4. Status of ARRA work at TA-21
5. Status of Base program work at TA-21 (Non-ARRA work, e.g. MDA A, MDA T, DP Site Aggregate, Groundwater network evaluation)
6. How DOE performs oversight of LANS (tools, processes, requirements)
7. Legacy Waste Program overview and status
8. Waste Isolation Pilot Plant (WIPP) overview and site tour- schedule for new members

NNMCAB Meeting Minutes 1-27-10
Board Approved & Certified by Chair, Mr. Ralph Phelps

1 Dr. Campbell asked about more information regarding soil vapor extraction test. He
2 mentioned that the CAB had recommended a soil vapor extraction test, but Dr. Campbell
3 considered the issue unresolved. Mr. Worth stated he would take action on checking out Dr.
4 Campbell's requests.

5 Mr. Maestas mentioned his priority regarding staying abreast of the Corrective Measures
6 Evaluation (CME) process at the Material Disposal Areas. He asked why the New Mexico
7 Environment Department (NMED) had fined the Lab close to a million dollars. He was
8 frustrated to learn that the CMEs were on hold until NMED decided the groundwater-monitoring
9 program was adequate. From a taxpayer's standpoint, Mr. Maestas would rather see the
10 money paid for fines go to remediation work. Mr. Worth responded that the Lab had submitted
11 the CMEs for all the sites but NMED contends there was additional groundwater data that
12 should have been submitted. The DOE actually went into stipulated negotiations with NMED
13 and DOE agreed to add seven additional wells. However, they needed to have four rounds of
14 sampling tests to satisfy NMED requirements. The new wells were in different stages with the
15 required sampling rounds. Mr. Worth stated negotiations were continuing between the DOE
16 Environmental Management (EM) Department and the NMED.

17 Mr. Longacre thought the board would still be discussing Material Disposal Area G (MDA-
18 G) in 2015. He considered MDA-G to be a tremendous problem. He valued Mr. Villarreal's
19 expertise on the waste issue at Area G. He believed in making decisions that protect the
20 citizens' of Santa Fe. When he was a city council member, Mr. Longacre voted to authorize the
21 Buckman Well project and he wondered if he made the right decision. He was concerned about
22 the quality of wells at the Buckman. He wanted to hear more about the Buckman project and
23 not just from LANS but also get more information about the Independent Peer Review for the
24 Buckman Direct Diversion Project. Essentially, Mr. Longacre was suggesting this board take on
25 issues other than MDA-G.

26 Mr. Phelps responded to Mr. Longacre. He stated the board has put a lot of emphasis on
27 Area G because, as a very large and complicated site with many issues, it was a board priority
28 and an EM program priority with enforceable milestones under the New Mexico Environment
29 Department's Order on Consent (Order or Consent Order). With regards to the Buckman
30 Project, Mr. Gallegos was the most knowledgeable board member on that topic. Mr. Phelps
31 stated that if any actions come out of the Buckman, which were within the board's scope, the
32 board could look at the issue.

33 Ms. Henline stated one of her presentation requests would be to hear more from NMED.
34 She thought there was some unnecessary divisiveness between the two groups. Perhaps there
35 would be an opportunity to ask question to both NMED and DOE regarding the CME process,
36 the imposed fines and the request for more groundwater monitoring data. Additionally, Ms.
37 Henline wanted to hear more about the groundwater at Technical Area-21. She stated that
38 looking at TA-21 would broaden the board's focus. Mr. Worth stated that they had presentation
39 information ready to go for TA-21 and he could provide this information to the board at an
40 upcoming committee meeting.

41 Dr. Campbell was interested in requesting a presentation on the Baseline Change
42 Proposal topic that was brought up at the January 13, 2010 Executive Committee meeting. He
43 wanted the presentation to compare the Baseline Change Proposal (BCP) to the clean-up
44 milestones contained in the Consent Order. Dr. Campbell requested this information for the

NNMCAB Meeting Minutes 1-27-10
Board Approved & Certified by Chair, Mr. Ralph Phelps

CAB Ad Hoc Budget Committee. Mr. Worth explained that for four years DOE has been under budget for remaining in compliance with the Order. Headquarters has asked LASO to reorganize the work, a very complex process, for which Mr. Worth could brief the board as to the progress with a presentation as more information was received. Mr. Maestas was not convinced that a new BCP would solve the issue of remaining compliant with the milestones set up in the Order. He believed that DOE could do what they can with the budget they have to work with and that was it. For him, the issue was really about facing reality regarding the clean-up milestones in the Order and whether they were physically achievable. Mr. Worth replied whether the program gets full funding or not, that there was the intention to meet all milestones DOE could with the budget allotted. Ms. Henline stated the board has commented on an earlier BCP without much affect, and she asked would this be a similar exercise in frustration. Mr. Phelps thought the CAB could be effective with regards to the budget. LASO has a relatively small budget, by comparison to some of the other sites, and the CAB's voice as a unified presence could make a difference in getting more funding.

Updated Ad Hoc Committee Roster:

Mr. Worth went over the CAB Ad Hoc Committee Roster. He asked the group to consider a new lead for the Public Outreach Ad Hoc Committee. Mr. Worth asked Ms. Henline to disband the Ad Hoc Committee on board process as its charge was completed. She agreed. Mr. Worth asked if there was any objection in renaming the FY'12 Budget Ad Hoc Committee to the Budget Ad Hoc Committee. No objections were brought forth; hence, the name was changed. Mr. Worth asked about the status of the Board Location Ad Hoc Committee. Dr. Shaw wanted to keep the committee active, and that she planned to submit a written summary of the Ad Hoc's conclusion by March 2010.

Dr. Campbell made a motion to disband the Public Outreach Ad Hoc Committee. Ms. Henline seconded the motion. The board discussed the motion. Ms. Henline was interested in continuing public outreach. Ms. Novak informed the board of the existing Public Outreach programs and materials in place, including a ready-to-go informational table with a three panel informational display, a three panel brochure, Press Releases, Public Service Announcements (PSAs) and a 15 Page Speaker's Bureau Presentation for board member and staff use. Ms. Santistevan recalled that the board has conducted a lot of outreach in the past for the community. The board has had several successful forums. Ms. Santistevan added the staff also needed a strong effort from the board to participate in the outreach program.

Mr. Phelps talked about the idea of investigating funding for a workshop. Mr. Maestas thought the board needed to define what they wanted to do for outreach, and to define the outgoing message. By disbanding this particular Outreach Ad Hoc Committee, this did not imply the board had to stop conducting outreach. The topic would continue to be discussed. We have had outreach in the past, disbanding this committee does not mean we disband the concept of outreach for the board, which was highly supported and part of the board's mission. Consider the topic was in continuing development and discussion. Dr. Campbell said his motion was to close this Ad Hoc but that a future Public Outreach Ad Hoc Committee would be welcome.

Mr. Phelps called for a vote on the motion to disband the Public Outreach Ad Hoc Committee. The board voted seven to disband, one to carry and two abstained. The motion carried. The Public Outreach Ad Hoc Committee was disbanded.

Discussed NNM CAB Top Issues:

The Top Issues for the NNM CAB would be presented at the SSAB Chairs meeting in April 2010. Mr. Phelps asked the board to develop their top issues for the spring meeting and to develop an accomplishment, which would be discussed and finalized at the next CAB meeting March 31, 2010. For reference, the board's current Top Issues are located on the CAB website.

Comments from Lee Bishop, co-DDFO:

Mr. Bishop asked the board to look at the informational posters provided by Mr. Fred deSousa, LANS. He discussed details of how to help the CAB develop these priorities. Mr. Bishop stated there would be some scope changes including new wells and another element to consider was the disposition of the 33 shafts at MDA-G which was to be left in place, excavated or partially excavated, for which the associated costs need to be included in the budget change proposal. He suggested those interested could go back and look at FY'11 budget as the Baseline Change Proposal may go several years back. Dr. Campbell made a request to get more information for the Budget Ad Hoc Committee.

IX. Open Forum for Board and Liaison Members

Mr. Phelps announced the open forum section of the meeting. This section was where members could bring up any relevant topic that they wanted. Mr. Phelps started the session by asking if the board would like to accept an invitation to have a half hour slot at the Defense Nuclear Facility Safety Board meeting. Mr. Phelps asked for board input on whether the board wanted to accept the invitation as an official board function? Ms. Henline wanted to get more information on the board and Mr. Phelps replied he had been to their website. He explained the group is a safety review board federally authorized by the Energy Policy Act and the National Defense Authorization Act. The mission of the board is primarily safety oversight at nuclear facilities. He suggested members refer to the mission on the website at the following address: <http://www.dnfsb.gov/about/index.php>. Mr. Phelps read directly from the website:

"For nearly half a century, the Department of Energy (DOE) and its predecessor agencies operated the nation's defense nuclear weapons complex without independent external oversight. In the late 1980's, it became increasingly clear to members of Congress that significant public health and safety issues had accumulated at many of the aging facilities in the weapons complex. As an outgrowth of these concerns, Congress created the Defense Nuclear Facilities Safety Board in 1988 as an independent oversight organization within the Executive Branch charged with providing advice and recommendations to the Secretary of Energy "to ensure adequate protection of public health and safety" at DOE's defense nuclear facilities.

Broadly speaking, the Board is responsible for independent oversight of all activities affecting nuclear safety within DOE's nuclear weapons complex. Prior to the end of the nuclear arms race, the nuclear weapons complex concentrated on the design, manufacture, test, and maintenance of the nation's nuclear arsenal. The complex is now engaged in cleanup of contaminated sites and facilities, disassembly of nuclear weapons to achieve arms control objectives, maintenance of the smaller stockpile and storage and disposition of excess fissionable materials." <http://www.dnfsb.gov>

Mr. Phelps interpreted their actions to be related to safety work more than environmental issues. Mr. Pacheco asked where the board was located and what was the composition of the membership. Mr. Phelps answered the board is based out of Washington, D.C. and comprised

NNMCAB Meeting Minutes 1-27-10
Board Approved & Certified by Chair, Mr. Ralph Phelps

of professionals. He announced the meeting was scheduled for February 11, 2010. He left the topic open for board consideration. Later in the meeting, the board decided not to accept the offer for a 30-minute time slot.

NNMCAB Liaison member, Mr. Mayer from EPA Region 6 provided a brief status update to the Board. Primarily, he was working on polychlorinated biphenyls (PCB) removal project authorized under The Toxic Substances Control Act of 1976 (TSCA) at LANL. TSCA provides EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics and pesticides. TSCA addresses the production, importation, use, and disposal of specific chemicals including PCBs, asbestos, radon and lead-based paint. The first step in the removal process was to remove a septic tank and the soil underneath the tank, where contaminants were found three or four feet deep. Under TSCA, this clean up was considered a risk-based clean up, which took longer than expected. After remediation, area was covered with a topsoil aggregate cover mix. Mr. Mayer had a site tour and he stated his intention to write a letter to EPA with his findings. His department planned to continue some oversight sampling of the area.

Additionally, Mr. Mayer informed the Board the EPA has obtained some additional budget for sampling of federal facilities throughout the Region 6 area. The New Mexico Environment Department's DOE Oversight Bureau (http://www.nmenv.state.nm.us/doe_oversight) has requested some of this funding to have some storm water and sediment samples analyzed. The DOE also want to do some verification sampling also nearer the Buckman and in the north fork of the Acid Canyon area, near the aquatic center. Mr. Mayer would consider sample requests from the CAB. Another project Mr. Mayer discussed, was pumping the West Bay Wells over a period of a week while taking samples to see if the water would sample clean to determine whether the wells had been affected by drilling additives. One other Region 6 initiative was to have a contractor help put items on the webpage for the NMED website and DOE would primarily fund this project. This was a repeat idea from a year ago and there were more documents to be added. Mr. Mayer added that the Draft National Pollution Discharge Elimination System (NPDES) Individual Stormwater Permit at LANL was still in negotiations. He explained the permit was appealed when several issues were sited including when to stop monitoring certain areas. The permit would require monitoring after storm events. Mr. Mayer stated that Los Alamos has one of the more sophisticated stormwater monitoring programs in the Region 6 area. Mr. Mayer answered questions from the board.

Ms. Henline asked about targeting the location of soil samples especially around Buckman Well area. Mr. Mayer replied soil sampling was a possibility in the Buckman area, although the actual wells have been sampled. The samples extracted from the wells did not reveal anything major other than naturally occurring uranium. Mr. Maestas questioned why the board was considering asking EPA to sample the Buckman area? Mr. Maestas stated that Santa Fe had employed Chemrisk Company to conduct independent sampling already. Ms. Henline replied that there was some concern about the extent of the data that Chemrisk was reviewing. Ms. Henline stated there was some concern about Chemrisk using the Water Quality Data Base for parts of their review. Dr. Shaw commented her opinion that there would always be people who think we need more sampling and she asked the members to keep this in mind.

X. Presentation 1. Status of Corrective Actions, with Dave McNroy, LANS

Mr. Dave McNroy, LANS Program Director for the Corrective Actions Program provided the board with a subject matter presentation entitled: "Corrective Actions Program Overview," LA-UR 10-00384.

Mr. McNroy introduced himself and Mr. Mayer, EPA as 20-year veterans working with Environmental Restoration (ER) Programs at LANL. He stated this presentation was meant as an overview of the Corrective Actions Program; an 'Environmental Restoration 101 course' that was meant to stimulate interest in other presentations. Primarily, the program had been reorganized into three main areas:

- Closure at TA-21
- Closure at TA-54
- Waste disposition project—all wastes leaving the Lab and looking at future generation of waste

Mr. McNroy's presentation provided an organizational overview, a discussion of scope, and project highlights. The Corrective Actions program was responsible for the investigation and remediation of approximately 800 out of 860 sites at the Lab. A summary of the presentation has been provided below.

The types of sites in the Corrective Action Program included:

- Landfills or Material Disposal Areas
- Pits, shafts, trenches, abandoned down-hole experiments
- Waste Water Management Systems
- Septic tanks, drain lines, outfalls, surface impoundments, waste water treatment plants
- Contamination from past and present operations
- Firing sites, spills/releases, historic surface disposal, leaking storage tanks

The Types of contaminants found at the sites:

- Radiological, chemical, heavy metals, high explosives and degradation products

The scope of the Corrective Actions program included:

- Surface water protection
- Monitoring
- Surface flow mitigation
- Analysis and reporting
- Groundwater protection
- Regional monitoring and reporting
- Monitoring associated with site remedies
- Natural Resource Damage Assessment support
- Technical and regulatory reviews
- Baseline and injury assessment
- Scoping and execution of restoration projects

The processes for the Corrective Actions program included:

- Characterization of surface, vadose zone, surface water and groundwater pathways (if applicable)
- Corrective actions
- Risk assessments

- Stabilization and monitoring
- Remediation and removals
- Continuous Improvements
- Safer and more cost effective waste management
- Regional baselines and cross-cutting applied studies
- Reassessing site conditions to current standards

The overview presentation also described Legacy Site contamination, which was the distribution and migration of legacy contaminants that were influenced by historic releases, current operations and natural processes. Mr. McNroy added that many of the legacy contaminant sources have been removed from the site. However, residual contamination remains in natural systems and migrates through:

- Soil sediments
- Vadose zone (unsaturated layer)
- Shallow & intermediate groundwater
- Surface topography that naturally favors migration
- Subsurface hydrogeology presents complicated characterization and remediation problems

The presentation went on to describe work plans and NMED deliverables. Mr. McNroy provided the group with some examples of highlights of the CA program, ones that the CAB may want to request for a more detailed presentation with a LANS Subject Matter Expert (SME).

Highlights:

Investigations of Los Alamos Canyon Aggregate Area (LA-SMA-2) were completed where polychlorinated biphenyl (PCB)-contaminated sediments were removed and the surface water flow was stabilized. The scope of the project included:

- Sediment removal
- Installation of surface water retention structures

Another project highlight was the 260 Outfall Surface CMI where a Permeable Reactive Barrier was installed. 260 Outfall had discharged for over 30 years, interesting work was completed with a permeable reactive barrier, these systems treat high explosives and barium, and these barriers try to minimize the movement of contaminants by reducing pathways. In addition, the program planned to install two additional wells down gradient of this site as sentinel wells. Mr. McNroy answered questions from the board.

XI. Public Comment Period

A public comment period was scheduled for 6:00 p.m. Mr. Phelps opened the floor for public comment. No one signed up to speak.

XII. Consideration of Recommendations to the Department of Energy

a. Draft Recommendation 2010-01, Disposition of Remote Handled Waste Buried in 33 Shafts at Technical Area 54

Mr. Villarreal, primary author, introduced draft Recommendation 2010-01 regarding the disposition of 33 shafts with mixed hazardous and radioactive waste at Technical Area 54 (TA-

NNMCAB Meeting Minutes 1-27-10
Board Approved & Certified by Chair, Mr. Ralph Phelps

54). Mr. Villarreal, a retired Lab employee, proposed options for remediation of the 33 shafts in varying forms during his employment with the Lab. Mr. Villarreal provided extensive background information pertaining to the issues. The draft recommendation proposed recommendations in the form of options for the disposition of wastes from the 33 shafts. The remediation of the 33 shaft area was an extremely complex task to examine and would require a diversity of facilities, technical expertise, regulatory protocols, administrative policies, environmental concerns, industrial and radiation safety practices, and collaborative approaches that would need to come together to achieve success. There would be a large number of disciplines necessary to provide solutions to the challenges of this undertaking. Without adequately trained personnel, working in a collaborative manner, the cost of this and other challenging EM projects would be ineffective and inefficient and cost the taxpayer an unreasonable amount of money while yielding unsatisfactory results. This project could be handled as a model that could be implemented on a national basis. In order to comply with the 2015 time limit established by the Consent Order, at least six methodologies were considered and summarized in the draft.

The intent of the draft recommendation was to remove the highly radioactive Remote Handled Transuranic (RH-TRU) wastes from TA-54 in a safe manner with a minimum of radiation exposure to workers at all levels. Accomplishing this will result in a successful closure of the site. If the "ideal" methodology was not feasible, then a secondary or "non-ideal" methodology should be considered. Equally important, this recommendation discouraged inaction to result in a final "no action" decision/non-decision for the disposition of the 33 shafts. The effect of implementing this recommendation was to help maintain public confidence in the ability of DOE/NNSA/LANS in collaboration with the EPA, State of New Mexico, and associated Pueblos to effect a complex but dynamic approach to disposition of the RH waste in the 33 shafts at TA-54 leading to eventual closure of MDA-G.

Mr. Villarreal went over the recommendations contained in the draft in detail. He also explained that the draft that went before the board for review at the meeting had members' comments incorporated.

Mr. Phelps solicited input on the tone of the draft from the members. Mr. Bishop, DDFO, provided some examples of dose amount to give the members perspective when reviewing the draft.

Board discussed Draft Recommendation 2010-01:

The board took up the draft for discussion. Ms. Henline thought the most important part was to make a decision in that we have the technology and the money; she liked the options that were offered in the recommendation.

Mr. Maestas thought the CAB should recommend removal or not. How they completed the project was out of his scope and he did not feel qualified to make comment. He was concerned primarily with the risk involved in remediation of the site. Mr. Bishop responded that the offsite risk does not change for the removal or non-removal options. Dr. Shaw thanked Mr. Bishop for his dosage clarifications. She could argue to remove or leave the waste in place. However, she has a lot of respect for Mr. Villarreal and his knowledge of the site. She also understood Mr. Maestas' points. Overall, she considered this recommendation to be a thorough summary analysis of options based on the background knowledge of a well-qualified person. Mr. Longacre expressed frustration with the board's process and the responses from the DOE.

He looked around the board to see many talented individuals. This is one of the best recommendations he has seen come from this board. When a knowledgeable member of this board took the time to put their thoughts down on paper, Mr. Longacre thought that was a positive thing and he would consider it a job well done for the board. Mr. Longacre stated, "job well done" to Mr. Villarreal. Dr. Campbell supported the draft as an important characterization plan with a strong set of options. He stated he was ready to take action on the draft. **Mr. Villarreal made a motion to accept the recommendation as final with author-approved modifications included. Dr. Shaw seconded the motion. The board voted in favor by unanimous approval to accept the recommendation for submission to the DOE.**

XIII. Presentation 2. Natural Resource Damage Assessment, with Nancy Werdel, DOE

Ms. Nancy Werdel, Project Manager for Environmental Operations, DOE Los Alamos Site Office provided a subject matter presentation to the board entitled, "Los Alamos National Laboratory Natural Resource Damage Assessment (NRDA) and Trustee Council Progress" Ms. Werdel provided an overview of the LANL NRDA and Trustee Council program and progress. Her PowerPoint presentation has been summarized below:

She described governing Regulations for the program:

- 43 CFR Part 11 – per CERCLA, which is the Comprehensive Environmental Response, Compensation, and Liability Act -- otherwise known as CERCLA or Superfund -- provided a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, EPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup.
- 33 USC Part 2602 and 2706 – per Oil Pollution Act
- New Mexico Natural Resources Trustee Act
- Department of Interior Implementing Procedures
- 2008 NRDA Final Rule – per Department of Interior
- Park Service Protection Act Guidance

The assessment process described in the NRDA Conceptual Framework:

- First, there was a contaminant release, which lead to a natural resource injury, culminating in a loss of service and an award of damages.

The goal of NRDA:

- Restore, replace, or acquire the equivalent of natural resources injured and the services those resources provided.

These natural resources included:

- Air, Surface Water, Groundwater, Soils/Sediments, and Biota/Vegetation, which were resources that Federal, State, or Native American Tribes may assert trusteeship

Ms. Werdel went on to describe the services were the beneficial outcomes, for people and their natural environment that flow from natural resources & ecosystem functions. Examples included:

- Harvesting of plants or animals

NNMCAB Meeting Minutes 1-27-10
Board Approved & Certified by Chair, Mr. Ralph Phelps

- Habitat for wildlife
- Cultural practices
- Provision of clean water

Cleanup decisions were based on:

- Future land use projections – who would use the site in the future and for what purpose?
- Risk based (human and ecological) – how much contamination posed a risk?

Natural Resource Restoration was based on:

- An economic value of natural resources injured and lost services caused by the contamination
- NRDA can complement remediation by going beyond cleanup to restore, replace or acquire equivalent resources
- Reasonable costs evaluation
- Natural resource restoration was typically residual to remediation

Ms. Werdel informed the board who the current trustee participants are:

- Department of Energy (Trustee and Potentially Responsible Party)
- DOE Headquarters and Los Alamos Site Office
- Technical support from Los Alamos National Security (LANS)
- State of New Mexico
- NM Natural Resources Trustee Office
- NM Attorney General's Office
- Native American Tribes
- San Ildefonso Pueblo
- Santa Clara Pueblo
- Cochiti Pueblo
- Department of Interior
- Fish and Wildlife Service
- National Park Service
- Bureau of Indian Affairs
- Department of Agriculture
- US Forest Service

The stated benefits of cooperative assessments were listed as:

- Pooling resources, experience, and expertise
- Collaboration increases efficiency and effectiveness, and decreases duplication
- Strength in having a unified approach
- Focus on mutually beneficial outcomes at sites where the lead response agency was also a trustee
- Damage assessment activities and remedial investigations.

Ms. Werdel briefly described the current status of NRDA at LANL:

- Preliminary Assessment Screen (PAS) Completed
- Trustee Council agreed to proceed with NRDA process towards full-scale assessment
- DOE is making final copies; PAS be released to the public in early February 2010
- Next Step - Assessment Plan
- Procure contract support for preparing the Assessment Plan (Summer 2010)
- Prepare Assessment Plan (2011)

NNMCAB Meeting Minutes 1-27-10
Board Approved & Certified by Chair, Mr. Ralph Phelps

- Initiate Full-scale Assessment (2011 and beyond)
- Assessment Plan Public Involvement
- Assessment Plan includes public process – including review and comment
- Website being developed to keep public informed

Ms. Werdel described the Exxon Valdez oil spill, which was a famous NRDA case. First, they looked at the resource, then the services that were lost, they determined the amount of the damage, which was used to restore, replace and acquire equivalent resources. She added land use stipulations were a big part of the assessment and there were differences between industrial or residential use scenarios. Effectuated time also factors in and one may be liable to the damages to the economic value of the resource. In some cases, the NRDA process can restore the site and then take it further. For example: Fernald was a heavy manufacturing site and now the whole site has been restored to a wild life park. The site was gradually turned back into a natural environment beyond its original use as a farm site. NRDA can restore the use of the landscape and could be used as a tool in the clean-up process and, if provided an opportunity, the NRDA could take the restoration of the site to a higher end state. Another option was to build or restore a site as compensation for the damaged resource. Ms. Werdel answered questions from the board.

Dr. Campbell stated the CAB has made recommendations to get a final determination of what an engineered cap for Area G would look like. He asked if this action would be part of the NRDA scope? Ms. Werdel stated she would follow up on Dr. Campbell's question.

XIV. Meeting Feedback and Adjournment.

Mr. Worth asked for input from board on Mr. McInroy's presentation as to which presentations the board might be interested in hearing more from a Subject Matter Expert (SME).

Dr. Shaw stated the meeting time was excessive in length and that our meetings could be much shortened. Mr. Phelps stated the board could consider shorter meetings.

Mr. deSousa asked the board to consider reviewing the Lab's request for an update to the NMED Hazardous Waste Permit, which included ongoing waste including high explosives. NMED has issued a permit that did not include an open burning permission, as especially used in the Lab's High Explosives (HE) work because the downside concern was regarding nitrate emissions and effects on wildlife. The NMED planned to hold public hearings in April 2010. The Lab considered this permit critical to ongoing missions and Mr. deSousa encouraged the board to comment.

With no further business to discuss, Mr. Bishop, Co-DDFO adjourned the meeting at 8:00 p.m.

Respectfully submitted,



Ralph Phelps, Chair, NNM CAB

NNMCAB Meeting Minutes 1-27-10
Board Approved & Certified by Chair, Mr. Ralph Phelps

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

Attachments:

1. Final 1-27-10 CAB Meeting Agenda.
2. Report from Ralph Phelps, Chair, NNM CAB.
3. Report from Menice Santistevan, Executive Director.
4. Report from Gerry Maestas, Chair, WM Committee.
5. Report from Pam Henline, Chair, EMSR Committee.
6. Draft NNM CAB Recommendation 2010-01.
7. PowerPoint Presentation, "Corrective Actions Program Overview," LA-UR 10-00384, with Dave McInroy, LANS.
8. PowerPoint Presentation, "Los Alamos National Laboratory Natural Resource Damage Assessment and Trustee Council Progress," with Nancy Werdel, DOE

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 may 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.