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General

**Northern New Mexico Citizens' Advisory Board**  
**1640 Old Pecos Trail, Suite H**  
**Santa Fe, New Mexico 87505**  
**505-989-1662 phone                      505-989-1752 fax**  
**800-218-5942**  
**adubois@doeal.gov              http://www.nnmcab.org**

San Ildefonso Pueblo

**Board Meeting Minutes**  
**November 15, 2000**

**Board Members Present:**

Menice S. Manzanares, Chair  
Jim Johnston, Vice Chair  
Fran Berting  
Jim Brannon  
George Chandler  
Patrick Feehan  
Sara Galpin  
Agustin Garcia  
Janet Gerwin  
Dorothy Hoard  
Angelina Valdez

**Board Members Absent:**

James Alarid  
John Alejandro  
Anthony Armijo – On Leave  
Tim Gallegos  
Domingo Martinez  
Evelyn Maruska

**Ex-Officio Members Present:**

James Bearzi, NMED  
MJ Byrne, DDFO/LAAO  
Tom Starke for Mike Baker, ER/LANL  
Joe Vozella, ER/DOE/LAAO

**Guest:**

Julie Canepa, ER/LANL  
Neil Weber, Director, San Ildefonso Pueblo, Department of Environmental and Cultural Preservation  
Myron Gonzales, Lead Technician of the Cultural Preservation Program, San Ildefonso Pueblo  
Judith W. Moss, Liaison Officer, NMED, DOE Oversight Bureau

**Staff:**

Ann DuBois, PWT

**I. OPENING**

MJ Byrne, Deputy Designated Federal Official, called the meeting to order at 6:15 p.m.  
Governor Perry Martinez of the San Ildefonso Pueblo welcomed the Board members and



the public. He introduced Neil Weber, Director, Department of Environmental and Cultural Preservation and Myron Gonzales, Lead Technician of the Cultural Preservation Program. Menice S. Manzanares, Chair, asked the Board members and members of the public to introduce themselves.

## **II. PUBLIC COMMENT**

**Paul Schumann, ER/LANL, Mail Stop K498, Los Alamos, NM 87544, 505-667-5840**

Mr. Schumann reported on the Sandia Task Force meeting that he attended on November 14. He encouraged the Board to connect with this Task Force that is a continuation of the Site Specific Advisory Board. He was impressed with their work on the Sandia landfill issue.

**Tom Weidner, ChemRisk, Center for Disease Control Project on Historical Records**

Mr. Weidner reported that the historical research into dosage records has been delayed due to security restrictions keeping project personnel from accessing the records. He hopes that these restrictions will be lifted soon so they can complete their research. A draft summary report on their progress to date is now available. The project will have a website by the end of year.

**James Bearzi, Chief, Hazardous Waste Bureau, New Mexico Environment Department, 2044A Galisteo Street, Santa Fe, NM 87502, 505-827-1557**

Dr. Bearzi reported on the Santa Fe Water Quality Task Force. The Santa Fe City Council is appointing the Task Force members. The New Mexico Environment Department's Drinking Water Bureau is looking at any potential impacts of LANL's operations on the drinking water supply. Dr. Bearzi suggested that the Task Force should also look at the Española sewage treatment problems that could impact Santa Fe's drinking water.

Dr. Bearzi reported on the Interagency Flood Risk Assessment Team. This interagency team is looking at the impact on risk with contaminant transport in the Los Alamos canyons. This task force is following up on any potential impacts from flooding after the Cerro Grande fire. He invited the Board to attend the December 18 open house that will be held at the Hilton Hotel in Santa Fe.

Dr. Bearzi said that LANL's RCRA Permit is up for re-issuance this year. The first part will be in draft form sometime this spring. Both the operating units and the Environmental Restoration program are involved. He offered to brief the Board if requested. The Board requested a briefing at the January meeting. A public comment period will be included in the re-issuance process.

## END OF PUBLIC COMMENT

### III. REPORTS

#### A. Neil Weber, Director, Department of Environmental and Cultural Preservation for San Ildefonso Pueblo.

The funding for the Department comes from DOE, the Environmental Protection Agency, the State of New Mexico, the Bureau of Indian Affairs, and the Indian Health Service. The Department participates in joint sampling events with LANL and the New Mexico Environment Department. His Department reviews the air quality reports prepared by LANL. An Airnet and a Newnet station are co-located on Pueblo land. The Department protects cultural sites including historical and archeological sites. The Department of Energy and LANL are on San Ildefonso's ancestral lands. The Pueblo works with LANL's Environment, Safety and Health Division 20 to map the cultural and historical locations using GIS mapping systems. The air and water sample results are compared with samples taken by LANL and NMED. The results are shared with DOE and the Environmental Protection Agency (EPA).

The Department has a Community Outreach program. The Waste Isolation Pilot Plant funds the Emergency Response team at the Pueblo. The Department is assessing the Pueblo's capability and developing a response plan. The Pueblo is involved in solid waste transfer and monitors drinking water quality and the fishing pond. The Pueblo has a liquid waste and sewage plant. The Pueblo is establishing a utilities department.

Mr. Weber reported on the effects of the Cerro Grande Fire on the Pueblo. The Department monitors the three hundred acres that were burned. The smoke effects are a big problem. The air monitoring stations were not in place at the time of the fire. A damaged area is sacred land near TA-54. The upper watershed for the Pueblo was burned. Run-off will be a problem particularly during this coming spring and summer monsoon season when run-off may flow through contaminated sites located on DOE-LANL property. The Pueblo is concerned about the transport of contaminants. The Department is now taking baseline samples of storm events. At present, no controls exist in Guaje canyon to stop the run-off from heavy storm events and the movement of burnt materials. The Pueblo took samples prior to the runoff, and coordinated samples with LANL and NMED through the use of automatic samplers and grab samples. Some rehabilitation has started in sacred areas, including cooperative logging with Jemez Pueblo.

Myron Gonzales was the producer of the video Closing the Circle. This video describes the experience and the perspective of San Ildefonso Pueblo living below Los Alamos. San Ildefonso is the only Native American Tribe to share contiguous borders with a DOE facility. Mr. Gonzales described the video as the

first time to tell the story from a Pueblo perspective. He interviewed tribal members about the effects on their traditional society. The National Park Service and DOE funded this video that will be shown on public access TV.

Mr. Gonzales described the Pueblo's efforts before the Indian Claims Commission. San Ildefonso pursues its court battle to restore its original land boundaries. This Pueblo is the last tribe to hold out and not settle its claims. This fifty year land fight is with the US Forest Service, and the Bureau of Land Management. He said that Santo Domingo and Sandia Pueblos settled with the government.

Mr. Gonzales requested the Board's assistance in getting the video shown to the Secretary of Energy at DOE Headquarters. Ms. Manzanares promised that the Board would send a copy to the EM-22 headquarters staff and request that they view the video, and assist in the effort to have the DOE Secretary view the film.

Tim Martinez, a tribal member asked about the Board's mission and views on WIPP transportation issues. He is concerned about environmental justice and the disposal of contaminants. Ms. Byrne explained that the Board's recommendations are sent to the DOE Los Alamos Area Office and Headquarters in Washington, D.C.

## **B. Chair's Report**

Ms. Manzanares suggested that Board members participate in a potluck at the December Board meeting. The Board members asked for the following items to be on the December agenda: a report on WIPP shipments, Dr. John Till's report on LANL's air quality, and Dr. Bearzi's overview report on LANL's permit modification process.

Ms. Manzanares requested that the Bylaws Committee consisting of Fran Berting, Domingo Martinez, Jim Johnston, and Menice Manzanares meet soon to recommend changes in the Bylaws.

Ms. Manzanares reported that she is sending a letter to DOE about Board members who have missed Board meetings, and not serving on committees. She will recommend that three Board members be replaced. Local officials and community leaders are being asked for nominations. Ms. Manzanares thanked Ms. Moss, Mr. Johnston, Ms. Byrne and Ms. DuBois for their outreach efforts.

## **C. DOE's Report**

Ms. Byrne reported that the Board is seeking a facilitator for Board meetings. A ATA Services is seeking additional candidates to act as facilitator for the January 24 meeting and retreat. Ms. Manzanares appointed a Committee to interview potential facilitators. The Committee members are Judith Moss, Jim Brannon,

Jim Johnston, and Menice Manzanares. The Board selected the date of January 20 as a tentative date for a Board retreat. A suggested location is the Hotel Loretto in Santa Fe.

Ms. Manzanares asked about the DOE approval for new Board members Jim Brannon and Dorothy Hoard. Ms. Byrne responded that DOE Headquarters has instituted a new approval process and we should be hearing soon.

**D. Waste Management Committee**

Ms. Manzanares asked that this Committee to meet and choose a Committee Chair.

**E. Community Outreach Report**

Mr. Johnston reported on the Transportation Symposium held in Santa Fe during November. The conference was well attended by 180 people and 21 exhibitors. The participants toured LANL's Solid Waste Treatment program and the burned areas. The response to the conference was excellent. In January 2002 another transportation seminar is scheduled. Ms. Manzanares commended Mr. Johnston for his outstanding work on this event.

KRSN offered to conduct a live interview at 8:10 am Thursday after each Board meeting. Either Ms. Manzanares or Mr. Johnston will participate in the interviews.

**F. Environmental Restoration Committee**

Dr. Berting reported on the SSAB Long-Term Stewardship Conference held on October 26-27. She thanked Julie Canepa, Sandra Martinez and Paul Schumann for their assistance in preparing for the conference. Dr. Berting thanked Mr. Brannon who prepared the Board's presentation. The conference statement requires action by this Board. Dr. Berting requested that Board members review the statement of principles, and structural changes. The Board will take a vote on whether to accept and support these principles during next month's Board meeting.

Dr. Berting commented on the Draft Study on the Programmatic Environmental Impact Statement. She asked Board members to review this document and make comments. On page 29, the description of LANL begins. Mr. Schumann said that LANL made extensive comments and changes to the National Authorization Act document on Long-Term Stewardship. Mr. Schumann will give to the Board a new version of this text. He said that Jim Werner, DOE Headquarters Stewardship Office, is interested in meeting with the Board.

Dr. Berting announced the Risk Assessment Workshop to be held on December 2.

The primary audience is Board members while it is a public meeting.

Dr. Berting said that the Environmental Restoration Committee will look at the draft long-term stewardship report at its December 4 meeting so the Board can vote on this matter at the December meeting.

**G. Monitoring and Surveillance Committee**

Ms. Manzanares thanked Mr. Garcia for Chairing the Committee in the absence of Mr. Armijo. Mr. Garcia reported that the Committee met last week. The main topic was the contamination found in a drinking water well in Los Alamos.

**IV. ADJOURNMENT**

The meeting adjourned at 9:00 p.m. Ms. Manzanares thanked the Board members for attending the meeting.

The minutes are an accurate and complete summary of the matters discussed and conclusions reached at the Northern New Mexico Citizens' Advisory Board meeting held on November 13, 2000.

Certified by:

\_\_\_\_\_  
Menice Santistevan Manzanares, Chair

\_\_\_\_\_  
Date

**Northern New Mexico Citizens' Advisory Board**  
1640 Old Pecos Trail, Suite H  
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Johnson Controls Building  
Española

**Northern New Mexico Citizens' Advisory Board**  
**Meeting Minutes**  
**October 25, 2000**

**Board Members Present:**

Menice S. Manzanares, Chair  
Fran Berting  
George Chandler  
Patrick Feehan  
Sara Galpin  
Agustin Garcia  
Dorothy Hoard  
Evelyn Maruska

**Ex-Officio Members Present:**

Michael P. Baker, ER/LANL  
James Bearzi, NMED  
Joe Vozella, EM/DOE

**Guest:**

Carmen R. Rodriguez, ER/LANL  
Tom Starke, LANL/Stewardship

**Staff:**

Ann DuBois, PWT

**Board Members Absent:**

James Alarid  
John Alejandro  
Jim Brannon  
Tim Gallegos  
Janet Gerwin  
Domingo Martinez  
Jim Johnston  
Angelina Valdez

**Ex-Officio Members Absent:**

MJ Byrne, DDFO/DOE  
Rich Mayer, EPA

**I. OPENING**

In the absence of the Deputy Designated Federal Official MJ Byrne, Joe Vozella, Assistant Area Manager of Environmental Management Programs DOE/LAAO, called the meeting to order at 6:15 p.m. He turned the meeting over to Menice S. Manzanares, Chair. Ms. Manzanares asked the Board members and members of the public to introduce themselves.

Fran Berting, seconded by Sara Galpin, moved to approve the meeting agenda as sent to

the Board before the meeting. The agenda was approved by consensus.

Sara Galpin, seconded by George Chandler, moved to approve the August Board minutes, as amended.

George Chandler moved, seconded by Angelina Valdez, to approve the September Board minutes, as amended.

## II. PUBLIC COMMENT

- A. **Tom Starke, Program Manager, LANL Environmental Stewardship Office, MS-J 591, Los Alamos National Laboratory, Los Alamos, New Mexico 87544 505-665-8118**

Mr. Starke invited the Board and other Site Specific Advisory Boards (SSAB) to participate in the DOE Pollution Prevention Conference to be held in Albuquerque in June. The webpage announcing the conference will be available soon.

Mr. Starke said that MJ Byrne took the conference announcement to the SSAB Stewardship Conference that was held this week in Denver. She will ask the SSAB Chairs if they want to participate in this conference.

- B. **Carmen M. Rodriguez, LANL ER, MS M707, Los Alamos National Laboratory, Los Alamos, New Mexico 87544 505-665-5358**

Ms. Rodriguez said that Ms. Elizabeth Withers, NEPA Document Officer, sent to the Board meeting a copy of the Special Edition of the SWEIS Yearbook Wildfire 2000. She distributed additional copies to Board members.

Ms. Rodriguez explained that Julie Canepa was absent due to illness.

- C. **James Bearzi, Chief, Hazardous and Radioactive Materials Bureau, New Mexico Environment Department, 2044A Galisteo Street, Santa Fe, NM 87502 505-827-1557**

Mr. Bearzi talked about the Santa Fe City Council Water Quality Task Force. The City Council is now selecting the Task Force membership. On November 1, the Task Force will meet with Dr. Till. At the December meeting, the Task Force will hear about how operations at the Rocky Flats facility resulted in contamination of the Westminster water supply.

- D. **Hank Daneman, P. O. Box 13260, Santa Fe, New Mexico 87502 505-983-5261**

Mr. Daneman is one of the founders of the Santa Fe City Council Water Quality



Task Force. He said that the Task Force is collecting materials on the hydrogeology of the area. The Task Force does not yet have an office. He asked if these materials could be stored at the Board office since the Task Force and the Board have common interests. Ms. Manzanares said that these materials could be stored at the Board's Santa Fe office.

### **III. REPORTS**

#### **A. Presentation on Tritium Detections in a Los Alamos Drinking Water Well**

Mat Johansen, DOE/LAAO said that the Department takes seriously the presence of tritium in a Los Alamos drinking water well. The current level of tritium is below the EPA drinking water standards. However, its presence is an indicator that there is movement between LANL waste and the aquifer. This movement is a key indicator of risk. Watchfulness is required so sampling will be increased to monitor what is happening with the well.

Dr. Berting asked Mr. Johansen to be more specific about the levels. Mr. Johansen responded that background levels are 1-3 picuries and the sample tested at 40 picuries per liter. Dr. Berting asked about the timeframe of this increase. Mr. Johansen replied that during 1997 this well was off line. The first sample was taken in June 1996 and tritium was seen then. Two samples have now been taken and the level has stayed the same. The nearby test well samples are consistent showing 36 picuries per liter. In 1993, the levels were the same.

Dr. Berting said that since this data is minimal, it is difficult to draw conclusions from it. Mr. Daneman expressed his concern that the strontium 90 levels are higher than the tritium. He thought that strontium 90 is a bigger risk to human health. Mr. Johansen replied that in January the data was 1.9 picuries per liter, which is closer to the drinking water standard. LANL used a new lab to establish greater precision on the sample results. Strontium 90 was not seen in the most recent sample. He said that in twelve drinking water wells, seven regional wells, and fourteen springs, there have been no valid samples showing strontium 90. Mr. Johansen added that strontium 90 was found in the shallow wells.

Mr. Johansen introduced Bob Beers with the LANL Environment, Safety and Health Division 18. Mr. Beers distributed a handout describing an overview of LANL's drinking water monitoring activities. Three of the four programs are conducted in cooperation with the New Mexico Environment Department, the Los Alamos County and LANL. One program is conducted solely by LANL.

LANL meets monthly with the Los Alamos County to discuss the results found in the previous month. The reports from these meetings are found in the annual Environmental Restoration Surveillance Report.

Mr. Beer described the strengths of the water system in Los Alamos. He said that the system's problems include perchlorates associated with the manufacture of rocket fuels, munitions, and jet propulsion. The original thought about the origin of perchlorates was the research on high explosives at TA-16 or TA-9. After investigation, the source is the Chemical labs where they are using perchlorates.

Mr. Daneman asked about the strontium 90 data that was collected in 1999. Ken Mullen explained that all the 1999 data on strontium 90 was canceled because it could not be validated. Mr. Vozella said that a more accurate answer was that LANL started using another laboratory that could reduce the uncertainty of the results. Mr. Mullen agreed with Mr. Daneman that the bigger concern is for strontium 90. The analytical data is hard to measure in the lower concentrations. Mr. Mullen said that LANL would continue to sample for strontium 90. He said that the 1999 Surveillance Report is nearly ready to be distributed. Mr. Johansen said that the values are a big concern because more of them are in the non-detect range. He added that the LANL's current sample testing program with better analysis shows the non-detects.

Peter Maimgren from the Rio Arriba Environmental Health Association in Española asked how does LANL determine if the water is safe and what will happen when there is a problem. James Bearzi, New Mexico Environment Department, explained that his Department will determine when LANL went past the legal limit and the law requires LANL or the Los Alamos County to treat the water, or not use the well.

A member of the public asked if the Potential Release Sites at LANL are the source of this contamination and who decides to shut down the well. Mr. Vozella explained that the Los Alamos County makes the decision to shut down a well. The DOE is taking the final steps to transfer the water system to the Los Alamos County. The County has leased the water system for some time. He said that the source terms have been defined and the Environmental Restoration program is responsible for the tritium in Pueblo Canyon. Each source term is being pursued by the New Mexico Environment Department and will be prioritized by risk including rapid movement.

Dorothy Hoard asked about the source of the strontium 90. Mr. Vozella said that LANL does not know the source at present. Mr. Chandler asked if it is possible for surface water to get into the drinking water well and contaminate it. Mr. Mullen said that the monitoring wells are showing approximately the same levels so it is not likely that the surface water was getting into the well. Mr. Mullen added that tritium is a concern because it shows that there is a pathway between legacy waste and the drinking water aquifer. He said that the source of the strontium 90 was the high atmospheric levels in the mid-1960s due to aboveground nuclear weapons testing.

Mr. Beer said that LANL is confident that perchlorates present in low levels in the Otowi 1 well are at or below 1 or 2-3.5 range. LANL communicated these results to the New Mexico Environment Department and the Los Alamos County. The EPA has not yet established the maximum limits for perchlorates before treatment. EPA is testing to find these limits.

Mr. Beer said that the tritium levels got LANL's attention. LANL increased the well monitoring samples and is working with the Los Alamos County and the New Mexico Environment Department to track and trend the results. Mr. Daneman asked why do the limits on the Chemicals of Concerns vary and if the effects on children and the elderly are concentrated in the human body in different ways. Mr. Beers responded that LANL must comply with the drinking water limits set by the New Mexico Environment Department. LANL has a toxicologist doing research on these levels. Dr. Feehan responded that at low levels, the limits are theoretical. For example, at low levels of strontium 90 at the 40 picuries level, the strontium 90 will not be taken up by the bone marrow. He said that radiation by itself is not the problem. The presence of tritium is an indicator of what else is going on in the pathways.

Mr. Daneman said that Al Shapola had graphs showing the effect of strontium 90 on the historical cancer incidence in Los Alamos. Dr. Feehan said that this issue is being researched. The data shows that thyroid cancer was a problem but not brain cancer. The brain cancer was found in people living in Los Alamos and working in Española so the cluster did not exist.

Mr. Maimgren from the Rio Arriba Environmental Health Association in Española said that he is doing an oral history project. He interviews people living in Los Alamos and Española. Mr. Maimgren found that 28 of 40 workers died of cancer. Dr. Feehan said that the types of cancers are usually prostate, breast or leukemia not lung. A thyroid cancer cluster did exist. The University of New Mexico did an epidemiological study. The low lung cancer rate seems to be the same as other parts of the country. Dr. Feehan added that people are living longer and more cancers are seen at 60 than at earlier ages.

Mr. Vozella described the upstream study to discover the source of the tritium. LANL will look at the first quarter sampling results. When the source of the tritium is identified, then the original producer will move the source to the evaporators at TA-53. LANL expects in the next 1<sup>1/2</sup> to 2 years to find and segregate the source. Then LANL will treat at the source or at the plant to quickly get the waste streams under control. Ms. Hoard asked if you could fingerprint tritium. Mr. Vozella said that tritium cannot be identified that way. Mr. Daneman said that because of the cost of tritium, it is effective to recover it. Mr. Steve Yanicak, New Mexico Environment Department, said that his Department is looking into methods to detect strontium 90 with all three of their labs.

**B. Chair's Report**

Ms. Manzanares said that an 8A contractor, ATA Staffing Services, will be providing both technical and administrative support to the Board as of September 29<sup>th</sup>. They hired Amanda Burton who is working temporarily until Terra Nash comes on November 20. Ms. Nash has both technical work experience and a technical education that will help the Board move forward.

Ms. Manzanares appointed a Bylaws Committee to suggest changes in the current bylaws. The Committee members are Dr. Berting, Mr. Johnston and Ms. Manzanares. The Committee should finish this task by January 1, 2001. Ms. Galpin suggested that the March 24, 1999 edition of the bylaws be redistributed to the Board members.

Ms. Manzanares asked the Board members to recommend other Board members so the Board can expand to the full complement of twenty-one members. She explained that Anthony Armijo requested a temporary leave of absence from Board activities to finish his degree. Ms. Byrne approved that temporary leave of absence. Ms. Manzanares said that Agustin Garcia would be the temporary Chair of the Monitoring and Surveillance Committee.

**C. DOE Report**

Mr. Vozella reported that Ms. Byrne is attending the SSAB Stewardship Conference along with proposed Board member Jim Brannon. He had nothing further to report.

**D. Waste Management Committee**

The Waste Management Committee did not meet this month. Ms. Manzanares asked if a Board member were interested in serving as Chair of the Waste Management Committee. She indicated that she has emailed some Board members about the importance of serving on committees and attending Board meetings.

**E. Monitoring and Surveillance Committee**

Mr. Garcia reported that Mr. Armijo, Dr. Berting and he went on a flight over Los Alamos to see the Cerro Grande fire damage particularly in the canyons. This experience was very instructive to see the monitoring and surveillance issues resulting from the fire. Mr. Larry Sanders took them up in his plane at no cost to the Board.

Ms. Manzanares asked Mr. Vozella for a report about the fire cleanup. Mr. Vozella said that all the physical construction is complete and they are cleaning

up and seeding the construction sites. The next Environmental Restoration public meeting is on October 31. The topic will be to update the report on the cyanide found in the surface water. He said that the U.S. Forest Service is checking the vegetative growth. On the flat areas, vegetation is growing well. The steep areas are more difficult to grow anything. The Forest Service may re-seed in the spring.

Mr. Vozella said that LANL experienced some recent storm events. Some erosion occurred away from any facilities or Pueblo land. The erosion was in Guaje and Water canyons.

Mr. Vozella said that LANL is working on the Potential Release Sites that were damaged by the fire. Less than thirty sites are being remediated, particularly at TA-2, TA-41 and the canyon bottoms. The LANL ESH-16 website on the Cerro Grande fire has the most recent information. (<http://drambuie.lanl.gov/esh/>) DOE gave NMED some funds to do a fire risk analysis and an independent dose assessment. The contractor will look at all the data and assess the risk to the public. The contracting process has begun. He offered a future briefing if the Board requested it.

Mr. Garcia said that the Committee is concerned about what LANL can do to clean up the water after it is contaminated. He requested a follow-up presentation at the next Committee meeting.

#### **F. Environmental Restoration Committee**

Dr. Berting distributed a written report. She announced the Risk Assessment workshop sponsored by the Board to be held on December 2. The workshop's purpose is to learn how to assess risk to the public. The workshop participants will use Acid Canyon cleanup decisions to apply what they learn. The next Committee meeting will be on October 30. Dr. Berting invited members of the public to join the Committee.

#### **G. Community Outreach Committee**

Mr. Johnston distributed a written report.

### **IV. Board Comments**

Ms. Manzanares expressed her appreciation to Jim Brannon for his work on the LANL Stewardship paper to be presented to the Site Specific Advisory Board Long-Term Stewardship conference.

Ms. Rodriguez asked if the Board had considered the Santa Fe WIPP office space. Ms. Manzanares said that this space was considered but parking is a problem. She said there might appear to be a conflict of interest if the Board were housed in the WIPP office.

Ms. Manzanares asked about the FY2001 budget. Mr. Vozella said that DOE/LAAO is working on how much carry over there will be and how much the LANL Environmental Restoration program will fund this year.

Mr. Chandler asked about the press coverage for this Board meeting. He suggested that the Board should invite the press for each meeting. A press release should go out from LANL before each meeting to announce the Board's agenda. Mr. Vozella said that this meeting had a timely issue. LANL came out with the data on tritium in a timely manner. The Board provided a public forum to discuss the implications of this information.

V. **ADJOURNMENT**

The meeting adjourned at 8:50 p.m.

The minutes are an accurate and complete summary of the matters discussed and conclusions reached at the Northern New Mexico Citizens' Advisory Board meeting held on October 25, 2000.

Certified by:

\_\_\_\_\_  
Menice Santistevan-Manzanares

\_\_\_\_\_  
Date

*Italics = deletions*

Underlining = additions

DRAFT - DRAFT

## BYLAWS

### Northern New Mexico Citizen's Advisory Board

#### I. MISSION

The responsibility of the Northern New Mexico Citizens' Advisory Board on Environmental Management is to provide meaningful opportunities for collaborative dialogue among the diverse multicultural communities of Northern New Mexico, the Department of Energy (DOE), the Los Alamos National Laboratory (LANL), and state and federal regulatory agencies. The responsibilities include regarding environmental restoration, waste management, monitoring and surveillance, transportation, outreach, future land use and associated activities of LANL and LANL-associated environmental issues. The Board ensures early ongoing community access to information (and its interpretation and implications) and dialogue that improves the quality of the decision-making process of DOE and LANL.

#### II. FUNCTIONS, SCOPE, AND ACCOUNTABILITY

**A. Functions:** The Board will provide independent advice and recommendations to the Department of Energy (DOE). *on the environmental restoration, waste management, monitoring and surveillance, outreach, future land use and associated activities of LANL and associated environmental issues* These recommendations will be consistent with Office of Environmental Management Environmental Management Site-Specific Advisory Board (SSAB) Guidance, December 2000 and the Advisory Committee Management Program, U.S. Department of Energy, Office of Human Resources and Administration, Office of Organization and Management 9-30-96. The function of the Board is to provide advice and recommendations concerning environmental restoration and waste management decisions at LANL. This advice will include the process, content, public participation, and other policy aspects of DOE Environmental Management, and extend to nuclear material and facility stabilization and disposition, project completion, and site closure.

**B. Scope:** The scope of the Board includes LANL aspects of the above functions, including:

4. The opportunity for the Board to discuss with DOE and the participating enforcement agencies their proposals and plans for such matters as facility expansions and closings, environmental projects, and the impact of environmental regulations;
2. Any aspects of environmental restoration and waste management issues related to all past, present, and future activities at LANL.

**C. Accountability:** *The Board advises the DOE on behalf on the residents of*

*northern New Mexico. The Board will interact with the appropriate DOE decision-makers. The Board may also respond to issues concerning environmental restoration or waste management activities and associated environmental issues raised by the public, federal state, or local enforcement agencies.*

The Board interacts with the appropriate DOE decision-makers to provide advice on matters within its scope, on behalf of the citizens of northern New Mexico. Board members, the public, or federal, state or local regulatory agencies, may raise these matters.

1. The Board seeks a free and open two-way exchange of information and views between Board members and the participating agencies, with where all are invited to speak and to listen.
2. Board members may request access to independent technical advice, staff, and training.
3. The Board will develop specific operating procedures and undergo requisite training to ensure that we all members will hear all views and use constructive methods for resolving conflict, making decisions, and dealing the differing viewpoints.
4. The Board will always remain accountable to the public and DOE and seek to promote multicultural community involvement. The Board will develop culturally appropriate procedures to ensure public participation in DOE's decision-making processes regarding environmental restoration, waste management, monitoring and surveillance, outreach, and future land use.
5. Board meetings will be open to the public, and the Board will give advance notice of a minimum of 15 days. Committee and Board meetings will be held on varying days and Board meetings will be held at regular times and in various public locations throughout northern New Mexico to encourage maximum public and Board participation.
6. The Board will always remain mindful of the various stakeholder interests represented on the Board. It will seek to ensure that all interested parties and stakeholders continue to be adequately and equitably represented.
7. The Board members will send all requests to the DOE Deputy Designated Federal Official<sup>1</sup> to ensure a prompt response. The Deputy Designated Federal Official is responsible for tracking DOE responses to requests from the Board and ensuring the completeness of those responses.
8. The Board and similar boards at other DOE sites are jointly chartered as the Environmental Management Site-Specific Advisory Board under the Federal Advisory Committee Act. The Board is thereby subject to the requirements of the Environmental Management Site-Specific Advisory Board Charter, the Federal Advisory Committee

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<sup>1</sup> The DOE Deputy Designated Federal Officer is \_\_\_\_\_ (from the National SSAB Guidelines).



Act (5 USC Appendix), and Federal Advisory Committee  
Management requirements (41 CFR 101-6).

### III. MEMBERSHIP CATEGORIES, REQUIREMENTS, & TERMS

**A. Membership:** The Board is a broadly constituted organization consisting of a diverse group of people representing the interests and concerns of northern New Mexico residents as LANL's activities affect them.

1. Members of the Board will be drawn from residents of the following counties: Bernallio, Los Alamos, Mora, Rio Arriba, Sandoval, San Miguel, Santa Fe, and Taos.
2. The number of Board members will be 21, but in case of *a vacancy vacancies*, the Board may act with a lesser number until *DOE fills such a vacancy* the vacancies are filled.
3. The Board membership will maintain a balance regarding gender, age, race/ethnicity, type or employment, neighborhood, expertise, income, educational levels and diverse viewpoints.
4. Board members may represent the stakeholder category within which DOE appointed them, *but will not and may* serve as formal representatives of any organizations with which they may be associated.
5. Board members must personally participate in Board and Committee meetings. *and* They may not send substitutes or proxies if they are unable to attend Board or Committee meetings. *without prior written approval of the Deputy Designated Federal Officer*. Members will work with other members to present their concerns when absence is necessary. The Deputy Designated Federal Officer must receive written or electronic notification prior to a Board meeting in order for the absence of a member to be excused.

**B. Terms of Office:** The Board membership is on a rotation schedule that will encourage new individuals to participate and will maintain s a balance between continuity and diversity inherent in the makeup of the Board. *and will encourage new individuals to participate.*

1. Terms of office will be two years from the date of official appointment by DOE.
2. Board members shall be appointed or re-appointed to each two-year term, or removed from the Board, by the Secretary of Energy or by his or her designee (the Deputy Designated Federal Official, consistent with the SSAB National Guidelines). *and* Members may serve any number of terms.

**C. Vacancies:** *When a vacancy exists, the Board may nominate a pool of at least three nominees within 60 days to the DDFO (the Deputy Designated Federal Officer).*

As soon as a vacancy exists, Board members, members from the northern New Mexico community at large, or individuals who reside or work in northern New Mexico may nominate someone or themselves to fill the vacancy. Nominees should meet, as far as possible, the Board's existing stakeholder balance, diversity and geographical distribution. The DDFO, with the participation of Board members, shall interview nominees and forward their recommendations to the Office of Environmental Management in DOE Headquarters for approval. The Chair and Vice Chair will question any Board member with three absences from any regularly scheduled meetings in any six-month period. The Board may recommend to the DDFO that the member be replaced.

**D. Removal from Membership:** The following procedure shall be used to remove a member from the Board:

1. A letter signed by the Chair shall be sent to the member, pointing out the member's failure to perform according to the requirements of the Bylaws.
2. The member will be asked to respond to the letter within 15 calendar days with either a letter of resignation or a letter stating why he or she should not be removed.
3. Failure of the member to respond within 15 calendar days will result in automatic removal from the Board.
4. After 15 days, the DDFO shall forward to the Office of Environmental Management in DOE Headquarters, the name of the Board member to be removed, together with the member's letter of resignation or his or her letter of appeal, or a statement of the member's failure to reply, with an explanation of the situation. The Board member shall receive a copy of this letter to DOE.

**E. DOE and Other Ex-Officio Participants:**

1. The Deputy Designated Federal Officer represents the Department of Energy.
2. The Board requests the following agencies or offices to appoint one representative and one alternate to serve as *a Board an ex-officio Board member who will provide information to the Board and assist with Board operations:*
  - a. The Environmental Protection Agency, Region VI Office;
  - b. The New Mexico Environment Department (NMED);
  - c. The Los Alamos National Laboratory (LANL).
3. Ex-officio Board members participate in Board deliberations but do not vote.
4. The Board may request that an agency replace an ex-officio representative for excessive absence or other cause.
5. The Board may request, on either a temporary or a permanent basis,

the participation of DOE's maintenance and operating contractor, major subcontractors, or any other entity, to supply information or provide expertise as needed. Such entities, their agents or anyone else serving as a resource participant, will be considered ex-officio members of the Board for a term established by the *voting members* Board.

#### IV. MEMBERSHIP RESPONSIBILITIES

**A. Board Commitments:** Board members make the following commitments:

1. To attend regular meetings and receive training;
2. To review and comment on environmental restoration *and* waste management, and other documents within their purview, that come before the Board, and submit timely recommendations to DOE, and participating and enforcement agencies;
3. To be available for *committee* Committee work between *regular* Board meetings, and to participate fully in the affairs of the Board;
4. To respond to concerns and questions raised by the public regarding environmental restoration and waste management issues raised by the public issues within the scope of the Board.
5. To work collaboratively and respectfully with other Board and ex-officio members in the best interests of both the Board and the public.
6. To accurately represent all matters before the Board. To represent accurately all matters before the Board.
7. To handle in a responsible manner information and materials provided by the agencies, particularly drafts developed for an agency's in-house use, that might have significant future revisions as part of the agency's working practices;
8. To establish an information distribution process to meet the diverse needs of the public regarding *environmental restoration and waste management. issues within the purview of the Board;*
9. To share *accordingly with the Board, any written communication with an individual, as a member of the Board about or for Board activities with the Board as a whole and with the DDFO.*
10. To act for the Board or as its representative only with the majority vote of the Board;
11. To serve on at least one project and one procedural Committee or task force during any given six month period;
12. *Any member of the Board may resign at any time if it will not be possible, for whatever reason, to fulfill the member's responsibilities and commitments to the Board.*  
To resign at any time if it will not be possible, for whatever reason, to fulfill his or her responsibilities and commitments to the Board. The resignation will be by written notice submitted to the Chair or DOE (the DDFO or Headquarters) and, unless otherwise specified in the notice, will take effect upon delivery.

**B. Ex-Officio Member's Commitments:** The Board requests that ex-officio Board members *made make* the following commitments:

1. To define and *clearly* communicate clearly to the Board the respective decision-making processes of the agencies they represent;
2. To provide timely access to information pertinent to environmental restoration, *and* waste management, monitoring and surveillance, transportation, outreach, future land use, associated environmental issues and related decision making at Los Alamos National Laboratory;
3. To inform the Board in a timely and proactive manner of agency processes, programs, projects, and activities pertinent to the Board's mission and purpose;
4. The Board requests that DOE respond to the Board recommendations *to DOE* within thirty (30) days, and explain the basis for DOE's decision and how DOE will implement in a reasonable and timely manner any recommendations that are accepted.

**V. BOARD STRUCTURE**

**A. Chair and Vice Chair:** The Board will elect, by majority vote, a Chair and Vice Chair. *The Chair and Vice Chair, who will seek to respect and* represent diverse viewpoints. The Chair will support the Board in a balanced and unbiased manner, irrespective of any personal views on a particular issue and see that all Board members have the opportunity to express their views.

1. *The Board will elect by majority vote the Chair and Vice Chair* The election for Chair and Vice Chair will be held before September 30 of each year. The terms of the Chair and Vice Chair will be one year beginning October 1.
2. The Chair will serve as liaison with the staff and facilitator(s), assisting in the preparation of the agendas, minutes of the meetings, and other necessary arrangements.
3. The Chair may draft and issue press releases and represent the work and positions of the Board. *within the following parameters:*
  - a. *The full Board should approve press releases in advance.*The Board may delegate *these* media responsibilities on an ad hoc or any other appropriate basis.
4. The Chair certifies to the accuracy of all minutes.
5. The Chair signs the certification of *the* a recommendation that the Board has passed by majority vote consensus. The Chair signs the majority and minority reports of recommendations not passed unanimously.

6. The Chair assures necessary administrative support for the Committees and task forces, *and provides a liaison for their respective chairpersons when called upon to do so.*
7. The Chair shall appoint members to Committees and task forces and ensure that the membership of the Committees and task forces reflects the diversity of the Board.
8. The Chair serves between regular meetings of the Board as contact for DOE as well as the participating and enforcement agencies.
9. The Vice Chair serves as *the* Chair in the absence or incapacity of the Chair.
10. The Chair and Vice Chair will have other duties as assigned by the Board.

**B. Executive Committee**

The Chair, the Vice Chair and the Chairs of the Committees shall constitute an Executive Committee. The purpose of the Executive Committee shall be to coordinate the work of the Committees and to formulate direction for the Board's activities.

No change in:

**B. C. Committees**

**C. D. Other Committees and Task Forces:**

**D. E. Structure of Committees and Task Forces: 1. thru 6.**

6. Any Committee may include non-Board members. *The members of the public must be equal to or less than the number of Board members.*

The number of public members may not exceed the number of Board members.

7. *However, non-Board members cannot vote or hold Committee leadership positions. Non-Board members shall be allowed to vote in Committee meetings but shall not hold Committee leadership positions.*

**E. F. Work Sessions:** Work sessions are defined as meetings of the Board, including ex-officio members, at which official action may not be taken. *and need not be formally advertised. They must, however, be formally advertised, to be in compliance with the Open Meetings Act.*

**G. Executive Session (Closed Session).** The Board shall announce fifteen days in advance of the meeting an Executive Session for matters concerning litigation, or private personnel matters.

## **VI. DECISION MAKING**

**A. Quorum:** A quorum of the Board consists of a majority of the members currently appointed of the Board.

### **B. Rules of Order:**

1. The current edition of *Roberts' "Robert's Rules of Order"* governs the administrative matters of the Board.
2. All decisions, other than decisions on recommendations, are made by majority vote of those members present and voting.

### **C. Requirements for recommendations to the DOE or other Agencies:**

1. *Recommendations to the DOE or other agencies shall be passed by the unanimous vote of those member present and voting. In the event no unanimous agreement can be reached, the Chair shall appoint representatives of each point of view to prepare separate reports before the next meeting representing majority and minority viewpoints, and the Board may approve the final reports before submission to the DOE or other agency, but neither of these shall be represented as recommendations by the Board.*  
Recommendations must shall be approved by consensus; if consensus cannot be reached, a majority and a minority report shall be written. These reports may be submitted to the DOE or other agency, but must be clearly marked as representing two (or more) points of view.
2. *If When an issue comes before the Board, the Chair or facilitator may refer the issue to the appropriate Committee or create a special task force for the purpose that issue. The Committee or task force will report progress to the Board at the next meeting. *for information, action or a date for final action.**
3. Where possible, recommendations will be distributed in the Board mailing packet fifteen days before the meeting.
4. Any Committee may bring a draft recommendation to the Board for a first reading at any Board meeting.
5. At the following board meeting, the Board will address the recommendation for the second reading. The Board may pass the recommendation at the second meeting.
6. Upon passage by the Board, all recommendations will be conveyed in writing within 15 days to the appropriate agency.
7. Consideration of recommendations from other SSABs or conferences will be handled in the manner described above.

### **C. Administrative Decision Making:**

1. Administrative functions of the Board may be delegated to staff persons or to the Chair.
2. If the Board finds need to review or affirm specific decisions made

under the authority delegated *by this paragraph of the Bylaws*, to the Chair or staff persons, such affirmation will be expressed by a majority vote of the Board at the next meeting.

**No further substantive changes.**

## **Proposed Recommendation on ARROW-PAK**

The NNM CAB is concerned about the current planned completion date of 2014 for the shipments of TRU waste from Los Alamos to WIPP. One of several factors involved in the delay is that the present packaging techniques result in a low density of waste being shipped. An innovative packaging technique from BOH Environmental seems to be suitable and may result in an increase in the density of waste, while still meeting regulatory requirements. If this be so, the number of shipments to WIPP from Los Alamos would be considerably reduced and would thereby expedite the removal of the surface-stored waste at TA-54, and possibly produce considerable dollar savings to the taxpayer.

Therefore, the NNM CAB recommends that the DOE and LANL study the technology known as Arrow-Pak, provided by BOH Environmental, to determine the feasibility of using it to ship waste from LANL and brief the NNM CAB on their findings and decision. A brief description and list of applications of the technology is attached.

### **ARROW-PAK TM MIXED WASTE TREATMENT TECHNOLOGY**

The Arrow-Pak technology has been successfully demonstrated at several DOE sites and is the preferred technology at EnviroCare in the State of Utah. The technology is the standard for treating low level mixed waste and is being developed by EM-50 for its use in transporting Transuranic waste to WIPP. The technology is now being tested and will soon be presented to NRC for type B certification. Boh Environmental's ARROW-PAK TM is a patented immobilization technology that meets the federal guidelines (40 CFR 268.45) for treatment and land disposal of mixed waste debris. The ARROW-PAK mixed waste treatment method places the debris in a thick high-density polyethylene jacket and seals it with a proprietary thermal fusion process to produce a leak-tight monolithic treatment capsule that immobilizes the waste for 300 years. ARROW-PAK's inherent material properties such as toughness, ductility, strength, fusibility, chemical inertness, structural stability, and longevity, enable it to be land disposed safely and securely without risk of material degradation or leachability of hazardous constituents. ARROW-PAK is certified for safe transportation as a Specification 7A Type A package per 49 CFR 173 and is approved by the State of Utah for direct disposal as a "Macro Capsule" at EnviroCare of Utah, Inc. under the facility's modified Part B Hazardous Waste Permit.

The ARROW-PAK field demonstration at Hanford successfully treated 880 drums containing legacy mixed waste debris in accordance with U.S. EPA Alternative Treatment Standards for Hazardous Debris, 40 CFR 268.45. Approximately 1,070 drums containing mixed waste debris generated from D&D operations at Oak Ridge were successfully treated with the ARROW-PAK technology and accepted for direct disposal at EnviroCare of Utah; the only commercially available disposal facility for mixed waste in the country. These two projects demonstrate that ARROW-PAK successfully meets the EPA Land Disposal Restrictions for mixed waste. In the case of the Hanford project, ARROW-PAK also demonstrated compliance with the State of Washington's WAC 173-303-140, Land Disposal Regulations.



13 July 2000

Mr. Jim Johnston  
Mail Stop: A194  
Warehouse SM30  
Bikini Atol Road  
Los Alamos, NM 87545  
Phone: 505-665-5293

Dear Mr. Johnston,

It was a pleasure to speak with you yesterday about Boh Environmental's Patented mixed waste treatment technology known as "ARROW-PAK". As we discussed, ARROW-PAK is a DOT-Certified 7A Type A Package previously deployed on behalf of the Department of Energy at Oak Ridge.

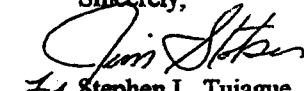
Typically, ARROW-PAK measures 30 inches in outside diameter and 23.3 feet in length. This configuration treats and transports seven 85-gallon overpack drums each of which contains compacted 55-gallon drums (or "drum pucks"). Assuming 4:1 compaction ratio, one ARROW-PAK can treat and transport 28 drum pucks.

Please find the enclosed information on ARROW-PAK, as promised, including:

- ARROW-PAK Technology Profile
- Benefits summary
- Certificate of Conformance as U.S. DOT 7A, Type A Package
- Photographs of ARROW-PAK Project at Oak Ridge in January 2000
  - Photograph 1 – Overpack Drums
  - Photograph 2 – One of 7 overpacks being loaded into ARROW-PAK
  - Photograph 3 – ARROW-PAK treatment unit being loaded on a trailer bound for Envirocare
  - Photograph 4 – ARROW-PAK labeled for transportation
  - Photograph 5 – Arrival and off-loading of ARROW-PAK at Envirocare for direct disposal

Thank you for your time and consideration. Please call me at 504-525-0952 or Eric Hediger at 703-449-6020 with any questions.

Sincerely,

  
Stephen L. Tujague  
President

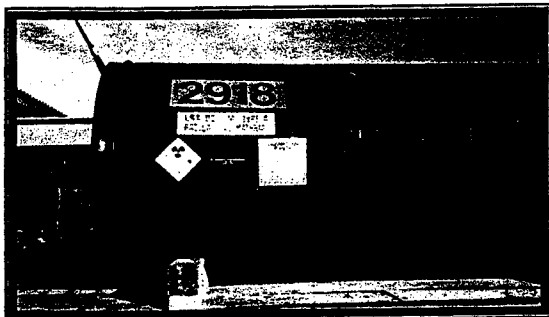
Cc: Eric Hediger  
General Manager

# ARROW-PAK™

## *Proven Mixed Waste Treatment and Disposal Solution from Boh Environmental, LLC*

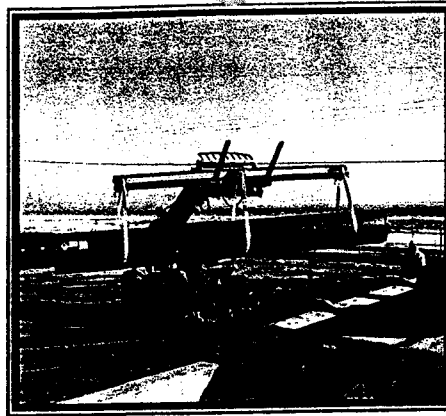
### Technology Description

Boh Environmental's ARROW-PAK™ is a patented immobilization technology that meets the federal guidelines (40 CFR 268.45) for treatment and land disposal of mixed waste debris. The ARROW-PAK mixed waste treatment method places the debris in a thick high-density polyethylene jacket and seals it with a proprietary thermal fusion process to produce a leak-tight monolithic treatment capsule that immobilizes the waste for 300 years. ARROW-PAK's inherent material properties such as toughness, ductility, strength, fusibility, chemical inertness, structural stability, and longevity, enable it to be land disposed safely and securely without risk of material degradation or leaching of hazardous constituents. ARROW-PAK is certified for safe transportation as a Specification 7A Type A package per 49 CFR 173 and is approved by the State of Utah for direct disposal as a "Macro Capsule" at Envirocare of Utah, Inc. under the facility's modified Part B Hazardous Waste Permit.



### Flexible Deployment Applications

- Treatment
- Disposal
- Transportation
- Vault encasement
- Interim/long-term storage



All applications have been approved by DOE as a result of high-performance testing conducted on the ARROW-PAK mixed waste treatment capsule over the past six years.

### Regulatory Approvals and Certifications

☒ **State of Utah / Envirocare of Utah, Inc.:** Approved for direct land disposal as a "Macro Capsule" under Envirocare's modified Part B Hazardous Waste Permit (1999).

☒ **EPA:** 40 CFR 268.45, Alternate Debris Treatment Standards (at DOE Hanford Site, 1997).

☒ **DOT:** DOT Spec 7A Type A Packaging per 49 CFR 173 (1999).

☒ **Washington State Department of Ecology:** WAC 173-303-140, Land Disposal Regulations (at DOE Hanford Site, 1997).

☒ **EPA:** Best Demonstrated Available Technology for Treatment of Irradiated Lead (1991).

☒ **DOE:** EM-50 approved.

### Performance Achievements

☒ **Demonstration and Evaluation of ARROW-PAK as an Alternative Macro and Improved Container for Mixed Waste Storage and Disposal (INEL/EG&G Idaho, 1993-94).** DOE conducted a series of drop/impact, helium leak, material irradiation and environmental exposure tests on both the drum and the lead forms of ARROW-PAK. DOE's major conclusions were that ARROW-PAK is:

**Leak tight** - passed all leak tests at/below  $1.9 \times 10^{-9}$  psig (one billionth of a psi) following drop tests at various handling heights and load weights.

**Radiologically resistant for 300 years or more** - based on material irradiation to a total dosage of over 0.7 Mrad.

**Resistant to environmental exposure for > 100 years (aboveground)** - based on accelerated acid rain and UV exposure testing results.

**Compliant with National Sanitation Foundation threshold requirements for polymeric liners** - therefore affording safe above-ground disposal.

☑ **Production-Scale Field Test of ARROW-PAK for the Macroencapsulation of MLLW Debris (880 drums) at DOE Hanford Site, 1997.** Demonstrated 100% compliance with U.S. EPA's "Alternate Debris Treatment Standards", 40 CFR Part 268.45. Represented the first time that 55-gallon drums containing MLLW debris have been successfully treated by macroencapsulation.

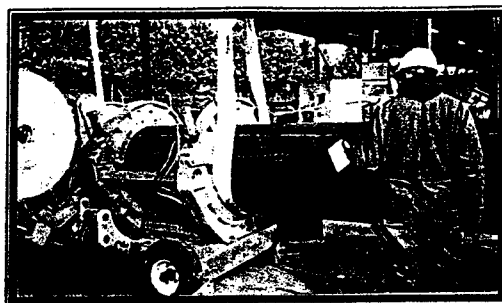
☑ **Treatment of Mixed Waste D&D Debris for Disposal at Envirocare, K-1420 Project, Oak Ridge, TN, Jan 2000-Present.** Treated over 400 drums of D&D LLMW debris under this ASTD project managed by Florida International University. All waste treated in ARROW-PAK was immediately transported to Envirocare for direct disposal.



#### **ARROW-PAK Deployment Benefits**

**Offers reliable no-risk mixed waste treatment & Envirocare disposal option:** Proven under ASTD program at Oak Ridge, TN.

**Monolithic alternative macroencapsulation treatment unit:** Does not feature polymeric coating of waste or encapsulation using a screw-top cap, spin-weld cap or any other mechanical cap device.



**Promotes worker safety:** HDPE material approved as suitable shield for contact-handled waste. Simple loading and fabrication requirements at ground level minimize OSHA site safety hazards.

**Easy to handle:** HDPE material is light in weight. Uses mobile systems and conventional industrial techniques. Can be deployed immediately to any DOE site. Can be custom-fabricated in a range of diameters and virtually any length, and can be field cut and re-fused if retrieval of waste within ARROW-PAK becomes necessary.

**Easy to load:** Encapsulation of metal drums is quick and easy with low insertion force.

**Chemically resistant:** Can be applied to most hazardous/mixed waste streams within the DOE complex.

**High strength:** ARROW-PAK will flex or elongate and stress relieve itself rather than rupture.

**Temperature resistant:** ARROW-PAK is stable under extreme changes in ambient temperature.

**Offers significant cost savings over current MLLW management approaches:** Eliminates need for RCRA-compliant storage buildings. Deployable with minimal manpower and equipment requirements.

#### **Contacts for Additional Information**

**Eric M. Hediger, General Manager**

Tel: (703) 449-6020

Fax: (703) 449-6022

[emhedigerboh@aol.com](mailto:emhedigerboh@aol.com)

**Stephen L. Tujague, President**

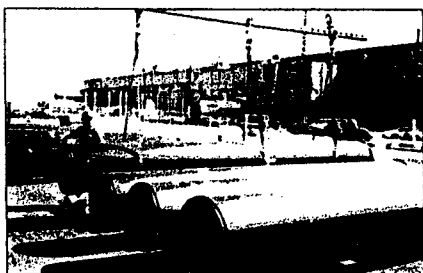
Tel: (504) 821-2400

Tel: (800) 284-3377

Fax: (504) 821-0714

[stujague@aol.com](mailto:stujague@aol.com)

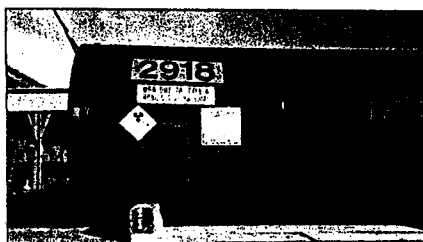
## Key Value-Added Benefits of ARROW-PAK™



**TREATMENT**

**Meets 40 CFR 268.45  
Alternate Debris Standards**

- *Hanford Site - Sep 1997*
- *Oak Ridge - Jan 2000*



**TRANSPORTATION**

**Certified as DOT Spec 7A Type A  
Package per 49 CFR 173 (Nov 1999)**

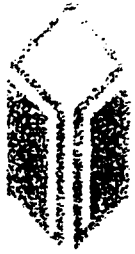
- *First deployed as a 7A Package - Jan 2000 (Oak Ridge)*



**DISPOSAL**

**Approved for direct disposal as a  
“Macro Capsule” at Envirocare of  
Utah, Inc. (Jul 2000)**

- *First ARROW-PAK  
disposal at  
Envirocare - Feb 2000*



**CONTAINER  
TECHNOLOGIES  
INCORPORATED**

**Certificate of Conformance  
(U.S. DOT 7A, Type A)**

Model No.: Arrow – Pak 30

Customer : Philotechnics

Specification Title: U.S. DOT-49 CFR

Specification: 7A Type A Certification

Work Order No.: 990253

Lot No:

Customer Contract No.: 99-0903

Serial No : AP-1 & AP-2

Maximum Gross Weight: 9,500 Pounds

Customer Facility: Tested/Certified at Container Technologies, Inc.

Container Technologies, Inc. certifies that the above product has been inspected and / or tested by me or my designated inspector and that it meets or exceeds the Quality Control requirements identified in the above specification / Purchase Order and Container Technologies, Inc. workmanship standards and Quality Control Manual. The Type A waste container (s) specified in this document complies with U.S. Department of Transportation (U.S. DOT) 49 CFR 173.24, 173.410, 173.412, 173.415a, 173.461, 173.462, 173.465, 173.474, and 178.350 (7A, Type A Container).

Q.A. APPROVAL:

Randel Layman  
Randel Layman

DATE:

11-30-99

Container Technologies Inc.  
P.O. Box 129  
163 Helenwood Detour Road  
Helenwood, TN 37755-0129  
Phone 423-569-2800 Fax 423-569-2806  
E Mail: ctinc@highland.net

**Northern New Mexico Citizens' Advisory Board**  
**1640 Old Pecos Trail, Suite H**  
**Santa Fe, New Mexico 87505**  
**505-989-1662 phone                      505-989-1752 fax**  
**800-218-5942**  
**adubois@doeal.gov      <http://www.nnmcab.org>**

### **Proposed Recommendation on Acid Canyon**

" It has come to the attention of the Northern New Mexico Citizens' Advisory Board that deposits of sediments containing high levels of radionuclides recently discovered in Acid Canyon have caused public concern in Los Alamos. The Board reviewed the As Low As Reasonably Achievable (ALARA) analysis and other documentation provided by DOE, LANL and NMED.

The Northern New Mexico Citizens' Advisory Board recommends to the DOE that the Department add to the baseline for LANL ER an additional cleanup in Acid Canyon. The option that the Board recommends that LANL clean up Acid Canyon as described in Option Two as described in the "ALARA Analysis for the South Fork of Acid Canyon" Table 1, the mid-range soil removal option."

***Northern New Mexico Citizens' Advisory Board***  
**ENVIRONMENTAL RESTORATION COMMITTEE**  
**Report for January, 2001**

The Environmental Restoration Committee now boasts five Board members, including the Chair: Fran Berting, Jim Brannon (in absentia, by phone), George Chandler, Dorothy Hoard, and Angelina Valdez!

**Meetings**

**January:** One meeting was held on January 9, 2001 at the Northern New Mexico Community College, for the purpose of determining how much of the previously proposed workplan we can actually accomplish with the workers we have. The revised workplan is outlined below.

**Future Meetings**

**February:** February 12, 6:00 p.m., in Espanola at the Johnson Controls Building on Railroad Ave.

**Schedule through remainder of Fiscal Year:**

March 12   April 9   May 14   June 11   July 9   August 13   September 10  
\*\*\*\*\*

**FISCAL YEAR 2001 WORKPLAN**

**Priority I of the original Workplan - Risk Assessment and Acid Canyon**

- 1) Follow up on our Recommendation concerning additional cleanup in Acid Canyon.
- 2) Write a Recommendation on the risk-based approach to clean-up decisions.
- 3) Become involved in the standardization of risk-based scenarios.

**Priority II of the original Workplan - MDA's**

- 1) Provide the ER Committee with basic current information on MDA's (Material Disposal Areas) at the February meeting.
- 2) Plan a Board Workshop, either within a regular Board meeting or on a Saturday morning, on MDA's, to provide a basis for Board recommendations that will help DOE and LANL in their planning. This workshop can be postponed until March, after the report from the High Performance Team for MDA's has been discussed at the February meeting.
- 3) Consider the Permit Modification Schedule for NFA's (No Further Action sites) at the February ER Committee Meeting.

**Priority III of the original Workplan - Long-Term Environmental Stewardship (LTES)**

- 1) Identify items of the LTES library that DOE-AL is assembling for which we would like copies for inclusion in the NNM CAB library.
- 2) Examine the DOE-AL LTES guidance document that is currently being reviewed at Headquarters, to determine what needs to be done locally.



## Department of Energy

Albuquerque Operations Office  
Los Alamos Area Office  
Los Alamos, New Mexico 87544

JAN 19 2001

Menice Santistevan-Manzanares, Chair  
Northern New Mexico Citizen's Advisory Board  
1640 Old Pecos Trail, Suite 11  
Santa Fe, NM 87505

Dear Ms. Santistevan-Manzanares:

Subject: NNM CAB Recommendation 2000-3

This letter refers to Recommendation 2000-3, adopted by the Northern New Mexico Citizens' Advisory Board at its February 23, 2000 Board Meeting. The recommendation, along with our reply, follows:

- (1) The DOE review the contract with Santa Fe Alloys with respect to the responsibilities of the respective parties for compliance and monitoring.

To the best of the Department of Energy's (DOE) knowledge, Santa Fe Alloys had no direct contracts with DOE but held subcontracts to perform research for DOE contractors. Based on its subcontracts to DOE contractors, Santa Fe Alloys obtained depleted uranium through the DOE Oak Ridge Operations Office in 1985. Santa Fe Alloys was apparently licensed by the State of New Mexico to possess this material. The material that was not consumed by Santa Fe Alloys in performing its work was recently recovered by DOE, and the Santa Fe Alloys site is being cleaned up by the owner under State jurisdiction.

- (2) The DOE review and have its contractors review contracting records to determine whether there are other similar failures elsewhere in the complex.

We have advised DOE Headquarters (HQ) of this situation and recommended that they have other DOE field offices review their past operations and contracts/subcontracts to determine whether they may have similar situations. The Albuquerque Operations Office (AL) is now performing a review of its situation in this regard.

- (3) The DOE insure that all its contracts require its prime contractors and their subcontractors to comply with all state and local regulations in the performance of DOE contracts or with respect to DOE-owned materials.



JAN 19 2001

DOE's ability or authority to control operations of subcontractors is normally limited to enforcement of the prime contract under which the subcontract was executed. In 1997, DOE developed a standardized Management and Operating Contract clause that addresses your concern. The relevant Department of Energy Acquisition Regulation (DEAR) clause provides:

In performing work under this contract, the contractor shall comply with the requirements of applicable Federal, State, and local laws and regulations (including DOE regulations), unless relief has been granted in writing by the appropriate regulatory agency . . . The contractor is responsible for compliance with the requirements made applicable to this contract, regardless of the performer of the work. The contractor is responsible for flowing down the necessary provisions to subcontracts at any tier to which the contractor determines such requirements apply. (48 C.F.R. 970.5204-78, 62 F.R. 34870, June 27, 1997)

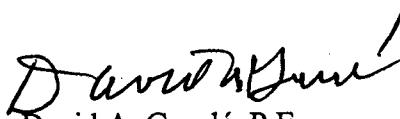
This clause is in all of the AL Management & Operating contracts.

- (4) The DOE take any other actions that may be necessary to insure that no DOE-owned hazardous materials are outside the control of the DOE or its prime contractors or their subcontractors as a result of lapsed business arrangements.

As part of our notification to HQ mentioned in (2) above, we recommended that HQ direct a review to identify whether similar situations exist and that field offices take action to correct any such situations that exist. As with (2) above, AL has undertaken a similar action.

Please call Joe Vozella at (505) 665-5027 if you have any questions or concerns.

Sincerely,



David A. Gurulé, P.E.  
Area Manager

LAAME:3JV-072