



**Northern New Mexico Citizens' Advisory Board
Environmental Monitoring, Surveillance and Remediation (EMSR) Committee
Work Plan
Fiscal Year 2006**

SECTION 1. MISSION STATEMENT

The NNM CAB Environmental Monitoring, Surveillance and Remediation (EMSR) Committee provides the citizens' perspective to the Department of Energy (DOE) on current and future environmental remediation activities resulting from historical Los Alamos National Laboratory (LANL) operations. The EMSR Committee will keep abreast of DOE and LANL's Environmental Restoration and Long Term Environmental Stewardship programs and plans. The committee will work with DOE and LANL to provide assistance in determining priorities and the best use of limited funds and time. Formal recommendations will be created when needed, and after approval, sent to the DOE for action representing the public's position on issues pertaining to air, surface water and groundwater quality. The EMSR committee will also work to ensure early, ongoing community access to LANL Environmental Remediation and Stewardship information and to increase community dialogue that improves the quality of the decision making process of DOE and LANL.

SECTION 2. ISSUES TO BE ADDRESSED IN FY 2006

1. LANL Groundwater Monitoring Program.

Historically, LANL has had significant releases of a wide range of radioactive and non-radioactive hazardous wastes to the underlying groundwater aquifers via a variety of pathways. These releases have caused measurable contamination of the aquifer in certain locations and have caused concern among the residents of Los Alamos and the surrounding pueblos and towns regarding contamination of their water supplies and consequent adverse health affects on the water users. In recognition of the operating history of LANL and the citizen's concerns, LANL conducts extensive regular sampling and analysis of water from the deep aquifer below Los Alamos to investigate the presence and concentrations of contaminants attributable to LANL and the fate and transport of those contaminants. Tests of groundwater from the deep aquifer in the Los Alamos area have shown the presence of very small amounts of tritium, high explosives, uranium, plutonium, and perchlorate in limited locations. The Laboratory has successfully conducted numerous activities that have significantly reduced or removed potential sources of groundwater contamination. Further monitoring and investigation will allow the Laboratory to effectively develop environmental restoration strategies. Laboratory Environmental Restoration personnel have initiated such projects as reducing the number of wastewater outfalls, implementing waste reduction and recycling strategies and cleaning up sites that had been contaminated during legacy operations. These efforts are ongoing.

The EMSR Committee will review progress and develop recommendations to ensure the groundwater program is implemented in as appropriate and scientifically valid manner as possible, that the results of the sampling and monitoring program are representative of the water quality of the aquifers and zones samples, and that the data are made available to the public, in particular those who rely on the same aquifers that underlie LANL, as expeditiously as possible. Further, the committee will encourage LANL and NMED to work together to take immediate, expedited action to reduce the sources of contamination to the aquifers and to abate any contaminant plumes when needed to protect public health and environment.

To ensure that the concerns of the EMSR Committee are fully addressed, the Committee will focus on the following aspects of the LANL Groundwater Monitoring Program:

- Monitor Long Term Plan for Well Maintenance and Closure.
- Review Current Effectiveness of Passive Reactive Barrier.
- Monitor Progress of Source Reduction (effluents).
- Evaluate Pathways Management Review and consider the adequacy of these efforts as a continuing means for adequately characterizing area hydrogeology.
- Monitor the compliance of the drilling, sampling, and data reporting programs with respect to specified federal and state standards and regulations.
- Encourage satisfactory closure on all old well issues, for example: evaluation of the effectiveness of the placement and design of deep wells.

2. NMED Compliance Order on Consent (the Order or Consent Order).

The New Mexico Environment Department Final Order on Consent was executed on March 1, 2005. The Order, which falls under the umbrella of the Resource Conservation and Recovery Act, specifies in detail how LANL will conduct cleanup work, under what guidelines, and within what time schedule for all historical, inactive hazardous/mixed waste disposal and spill sites at LANL.

Given the history of interactions between LANL, DOE, and NMED, the EMSR Committee is concerned that the actions required under this order will result in additional program delays due to such issues as insufficient review staff (DOE and NMED), insufficient funds authorized for cleanups, or inappropriate procedural delays. Consequently the EMSR Committee will provide an aggressive oversight of the implementation progress of the Corrective Action Order by all parties to the Order, especially concerning scope, priorities, and funding, and review deliverables mandated by the Order with the objective of recommending improvements or changes to Order implementation by any and all parties as needed to facilitate the cleanup of LANL.

Specific Areas of Interest regarding the Consent Order that the EMSR Committee will emphasize include:

- LANL / DOE Implementation of Deliverables contained in the Order.
- NMED Responses and DOE Support of NMED Staffing needs.
- Risk Reduction.
- 'Quality' of Submissions.
- Budget Tracking.

Each year DOE briefs the NNM CAB on expected funding for the upcoming fiscal year. Each year the NNM CAB recommends that the DOE aggressively pursue funding to adequately perform the duties the public expects for restoration, monitoring, and disposition of legacy waste. **The EMSR Committee expects this annual cycle to continue and that the NNM CAB will keep these issues before DOE managers.**

3. LANL Property / Land Transfer Issues.

- What are the applicable clean-up standards?
- What is the Land Transfer Schedule?
- How to expedite the property transfer process.

4. Progress on the characterization and remediation of the Material Disposal Areas (MDAs) covered by the Order.

The MDA H pilot project continues through the Corrective Measures process. The EMSR Committee expects to follow the pilot project to its conclusion through the choice of a final remedy. **The Committee will also follow progress of investigations at MDAs B & A and other MDAs scheduled for work in 2006.**

5. Environmental Data Reporting, Access and Quality Assurance.

A significant duty of LANL is to monitor and accurately report environmental data to the public with regards to current, past and future operations at the Laboratory. The EMSR Committee considers quality and accuracy of data reporting to be a foremost responsibility of LANL and considers that the depth, breadth, and credentials of the staff of LANL are such that quality of data and interpretation of data should not be an issue. We also consider it to be the responsibility of LANL to make all possible environmental data available to the public through easily accessible and user-friendly means.

Several instances have been identified recently where the data reported by LANL do not accurately represent the actual quality of the environment, particularly in the areas of surface and groundwater quality. Therefore, the EMSR Committee will review data and the associated interpretive reports from LANL to ensure that quality objectives are stated, that compliance with those quality objectives is presented, and that action plans are presented to rectify any quality assurance issues. With respect to data availability to the public, LANL has made significant improvements in that area, but the committee will continue to monitor the appropriate reports and websites to ensure that the progress is sustained and additional improvements are made.

Specific Areas of Focus Regarding Environmental Data Reporting, Access, and Quality Assurance that will be monitored by the EMSR Committee include:

- Evaluate Continuity of Quality Assurance Reporting.
- Develop recommendations to improve public accessibility to environmental data.
- Review clarity of reports intended for the general public.
- Follow-up to EPA review of monitoring well program.
- Review Inspector General's Report.

6. Recommendation Tracking.

Over the past year, the EMSR Committee has authored five recommendations that were presented to DOE for their review and consideration.

- 2005-02 EMSR - [Regarding Accessibility and Usability of LANL's Environmental Quality Database Website](#)
(DOE Response Pending)
- 2005-03 EMSR - [Regarding Improving Availability and Clarity of Community Specific Environmental Information and Environmental Quality Information](#)
(DOE Response Pending)
- 2005-06 EMSR - [EPA NAREL Plans for a National Monitoring System](#)
(DOE Response Pending)
- 2005-07 EMSR - [Regarding LANL's Quality Assurance and Quality Control Programs](#)
(DOE Response Pending)
- 2005-08 EMSR - [Support For Additional Staff in New Mexico Environment Department to Implement Consent Order with Department of Energy and the University Of California](#)
(DOE Response Pending)

To ensure that we continue to be beneficial to both DOE and the public with respect to the environmental programs at LANL, the EMSR Committee will follow up on DOE responses to NNM CAB recommendations, will report those responses to the Board, and will track DOE compliance with NNM CAB recommendations.
