

## **ENVIRONMENTAL MONITORING, REMEDIATION AND SURVEILLANCE COMMITTEE 2008 Work Plan**

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### **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

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### **SECTION 2. ISSUES TO BE ADDRESSED IN FY'08**

#### **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. LANL and other regulatory groups conduct regular sampling and analysis of water from the deep aquifer below Los Alamos to investigate the presence and concentrations of 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 small amounts of tritium, high explosives, uranium, plutonium, perchlorate and since 2006 chromium.

In the last year, it has been recognized that the data from many characterization wells or well screens are compromised due to the fluids used during drilling.

Laboratory personnel have initiated projects to reduce the number of wastewater outfalls, implementing waste reduction and recycling strategies working toward a goal of zero discharge. The LANL has also developed methods to clean up sites that had been contaminated during legacy operations.

The EMSR Committee will work to ensure that the groundwater monitoring and characterization program is implemented in an appropriate and scientifically valid manner, 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, 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:

- Track LANL progress relative to the 17 recommendations in the NAS final report.
- Track LANL effort to cleanup some existing wells and well screens and to drill new wells where needed, using drilling methods which will not compromise data. (3 hours, 2 people over 1 year)
- Track NMED requirements, LANL CME's and efforts to understand the movement of Chromium in the aquifer. (3 hours, 2 people over year)
- Review and understand new methodology as presented in Well Screen Analysis Report Revision 2, LA-UR-07-0873 and its significance in the presentation of well data (4 hours ea, 2 people)
- Review progress of new wells (ie R35) (2 people, 2 hours ea, twice a year)
- Keep abreast of new conceptual model for Sandia canyon (ala D.Katzmann) (3 people, 3 hours ea)
- Review changes that LANL incorporates in the Integrated Project Execution Plan and Risk Management Plan concerning groundwater (2 hours, 1 person)
- Review the report concerning LANL groundwater developed by National Academy of Sciences. (2 people, .8 hours ea)
- Review LANL steps to annotate compromised well data in existing and new data bases (.4 hr, 1 person, quarterly)
- Keep abreast of any new hydrological data, studies or plans (8 hours ea, 2 people)
- Monitor Progress of Source Reduction (effluents). (5 hours one person, Quarterly)
- Consider a Groundwater workshop (5 hours all members) Implement (4 hours ea, 2 people)
- Include Long term stewardship in plans (.5 for various people)
- Possible new recommendations for multi-agency taskforce and HPT concepts (2.5 hours, 1 person)

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## **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.

The EMSR Committee is concerned that the actions required under this order may result in additional program delays due to issues such as staffing (DOE and NMED), insufficient funds, or procedural delays. The EMSR hopes that delays which might occur are minor. Our emphasis is to move forward as fast as possible, achieving an accelerated cleanup schedule wherever possible.

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.

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

- Monitor LANL / DOE Implementation of Deliverables contained in the Order. (Review LANL provided time table on a bimonthly basis.) (.5 hour, 2 people each quarter)
  - Assess sufficiency of DOE support for NMED implementation of the Consent Order (2 hours total, 2 people) Develop (if) needed recommendations (2 hours, 1 person)
  - Identify areas where accelerated cleanup is advisable (3 hours total, various)
  - Review Sufficiency of proposed financial support for implementation of the Consent Order. 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. (6 hours, 2 people as presented)
  - Monitor SWMU, contaminated sites under the Consent Order. (4 hours total, 1 person)
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**3. Monitor Progress on the characterization and remediation of the Material Disposal Areas (MDAs) covered by the Order.**

- Review changes that LANL incorporates in the Integrated Project Execution Plan and Risk Management Plan concerning MDAs, and in particular plans for opening of new pits in Area G (3 hours, 2 people)
  - Follow the MDA H pilot project to its conclusion through the choice of a final remedy. (4 hours, 1 person)
  - The Committee will also follow progress of investigations at MDAs B, L, G and other MDAs scheduled for work in 2008 (3 hours, spread out)
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**4. Environmental Data Reporting, Access and Quality Assurance.**

The EMSR Committee will review data and the associated interpretive reports from LANL to ensure that data is readily available, easy to find and use, and that the value of the data (qualifications as to collection, accuracy, etc.) are clearly in place. This includes RACER and other data bases. (5 hours, 2 committee members)

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**5. Review plans and remedies at an early stage to include public in determining endpoints and long term stewardship**

In all areas of cleanup, remediation and ongoing work, study the relationship of cleanup, endpoints expected when cleanup is completed and long term stewardship issues. The EMSR feels that end points should be included very early on in the plans for remediation. Under the Consent Order, public opinion is invited very late in the cleanup cycle, and it is hoped that the public can be included much earlier in the understanding and choice of endpoints and stewardship. (various, 4 hours)

- Include public by participating as a speaker at various groups with CAB information kit (2 hours each session for each member who gives talk)
  - Include public by developing a Community Involvement Plan (2 hours, 2 or 3 people)
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**6. Review and use the document The Politics of Cleanup as a tool to make the EMSR more effective, where relevant.**

(2 hours, each committee member)

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**7. Review NMED's draft permit renewal of LANL's permit, available Aug 27, 2007**

(8 hours each 2 people)