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NORTHERN NEW MEXICO CITIZENS' ADVISORY BOARD (NNMCAB)
Environmental Monitoring, Surveillance and Remediation Committee

Recommendation to the Department of Energy
No. 2009-10

Recommendation to Convene a Panel of Water Quality Experts

Background

Characterization of underground water has been an important component of the Department of Energy's (DOE) cleanup at Los Alamos National Laboratory (LANL). Water sample measurements from multiple wells have been key to deciding upon whatever remediation measures may be needed.

Recent questions about the validity of some data from wells which may have been compromised during drilling, by the use of drilling muds, has led to the decision to drill approximately 15 new wells. These new wells are being drilled largely with casing advance methods, using primarily water and air as drilling fluids. Also, Los Alamos National Laboratories (LANL) is attempting to identify which old wells could be brought up to a level where new data from these wells will be reliable.

During this development period, several agencies have reviewed the progress and methodology used by LANL. This includes the Environmental Protection Agency's (EPA) Kerr Lab^[1] and a committee of the National Research Council (NRC)^[2].

Moreover, in order to help to ensure effective oversight of the cleanup of legacy wastes at LANL, members of the Northern New Mexico Citizens Advisory Board (NNMCAB) have twice formally recommended to the DOE that a panel of independent water quality experts be convened. To wit, "Recommendation for a Groundwater Panel at LANL" [Recommendation No. 2007-03] was authorized by the NNMCAB on September 19, 2007. The DOE responded to this recommendation on November 7, 2008 by saying that outside experts were already being employed by DOE's Environmental Management (EM) program, and that additional experts were not needed, at that time. Then on May 14, 2009 the NNMCAB authorized "Recommendation for Consideration of Suggestions Contained in the Kerr Lab Report" [Recommendation No. 2009-03]. On September 1, 2009 DOE responded by again declining to assemble an independent expert panel.

Nevertheless, DOE Headquarters has suggested privately to the Chair and the Vice-chair of the NNMCAB that an independent panel of experts might be convened anyway to study these questions^[3], sometime in the late fall of 2009. Unfortunately, Mr. George Rael, DOE/LASO indicated on August 28, 2009 that this expert panel would not convene in November, and no alternate date was indicated.

Comments and Observations:

At a special meeting of the NNM CAB on April 8, 2009, the EPA sent its Kerr Lab scientists Steven D. Acree and Richard T. Wilkin to describe their review of LANL's Well-Screen Analysis Report (WSAR) Rev 2 [LA-UR-07-2852]. At this time, EPA's suggestions for improvements in LANL's approach to its stewardship of important groundwater resources were repeated to NNM CAB members, and NRC's suggestions for similar improvements were reiterated.

Today, many citizens, both expert and lay, still have reservations about the cleanup of some LANL wells and of LANS' general approach to water quality stewardship. NNM CAB members believe that careful consideration should be given to views by independent water quality experts.

In summary NNM CAB members continue to believe that, in order for LANL's cleanup operation to maintain credibility in the eyes of the general public, it is essential that all suggestions of a recognized oversight agency such as the EPA, consultative groups such as the NRC, and independent authorities be carefully considered.

Recommendation:

1. DOE should convene the already planned expert panel to review LANL groundwater protection practices. Independent recognized authorities on well-drilling practices should be invited to make critical presentations. These presentations should be open to the general public.
2. A forum should be planned for the general public where members of the expert panel can answer questions about their mandate and their methodology, and members of the general public can make short statements.

Intent

The intent of this recommendation is to help the DOE and LANL to maintain good relations with oversight agencies, such as the EPA, and to keep the general public fully informed of the ongoing cleanup of legacy wastes at LANL.

Effect

The effect of implementing this recommendation will be to help to maintain public confidence in the ongoing cleanup of legacy wastes at LANL.

References

[1] Letter to Richard Meyer, EPA region 6, concerning review of LANL's WSAR rev2; Steven Acree and Richard Wilkin; March 30, 2009.

[2] “Plans and Practices for Groundwater Protection at the Los Alamos National Laboratory”; Committee for the Technical Assessment of Environmental Programs at the Los Alamos National Laboratory; Nuclear and Radiation Studies Board; Division on Earth and Life Studies; National Research Council of the National Academies of Sciences; 2007.

[3] Oral statements by JD Campbell (NNMCAB Chair) and Ralph Phelps (NNMCAB Vice-chair) to NNMCAB members about plans for a DOE Headquarters expert panel; spring, 2009.