

**Request for Action to  
New Mexico Legislative Water & Natural Resources Committee  
Presented on Behalf of Our Endangered Aquifer Group  
By Dave McCoy, Executive Director, Citizen Action New Mexico  
[dave@radfreenm.org](mailto:dave@radfreenm.org)  
November 8, 2012**

**I will discuss two sites contaminating Albuquerque's drinking water supplies — Sandia National Laboratories' Mixed Waste Landfill dump and the Kirtland Air Force Base aviation gas and jet fuel spill. Both sites show the danger of not doing timely and reliable groundwater monitoring and cleanup before contamination reaches the drinking water. At KAFB the fuel spill was discovered in 1997. It wasn't until 2006 that monitoring was performed that detected jet fuel floating on the aquifer at 500 ft deep.**

**I. The Mixed Waste Landfill is technically not a landfill, but is a 2.6 acre Cold War waste dump at Sandia National Laboratories located within the boundaries of Kirtland AFB. The dump operated from 1959 to 1988 to receive radioactive and hazardous wastes from nuclear weapons production.**

- **Sandia intends to leave these wastes about one mile from the children's park for Mesa del Sol. There are 119 barrels of long lived plutonium wastes contained in the dump along with tons of depleted uranium, tritium, lead, beryllium, and solvents PCBs, PCE. Wastes are haphazardly dumped in 55-gal drums, bottles, cardboard boxes and plastic bags in shallow unlined pits and trenches above ABQ's drinking water aquifer.**
- **This is a dump that could be cleaned up now to avoid major aquifer contamination.**
- **There has never been a groundwater monitoring network that provided reliable data.** In 1989 four groundwater monitoring wells were installed at the dump.
- **Shortly after the regulatory agencies all knew that the groundwater monitoring wells were put in the *wrong locations* at the MWL dump, that the wells had *corroded well screens* and were *contaminated with Bentonite clay that hides evidence of contamination*.**
- **The defective monitoring wells were allowed to remain in place.**
- **In 2005 based on the false monitoring data, Sandia obtained a decision from the NMED to leave the wastes under a dirt cover.**

- A 2006 TechLaw report criticized the dirt cover but it was kept secret from the public until 2009.
- In 2007 Citizen Action and Registered Geologist Robert Gilkeson filed a complaint with EPA Region 6 that the monitoring well network was defective.
- In 2010 the EPA Inspector General reported that EPA Region 6 technical staff agreed with many of our concerns that the monitoring network was defective.
- ***The MWL dump wastes have already begun to enter the groundwater.*** Nickel, chromium, cadmium and nitrates are in the groundwater. Cancer causing volatile organic solvents are moving deeper beneath the MWL dump.
- The NMED 2005 Final Order (Curry) required Sandia Labs to make a review every five years about the feasibility for excavation of the MWL dump and the suitability of the dirt cover.
- NMED is planning on approving a Long Term Monitoring and Maintenance Plan without a public hearing and without performance of the 5 year review.

**The Committee should draft a memorial that includes the following actions for the Mixed Waste Landfill dump:**

1. Perform the 5- year review for the MWL Dump mandated by the NMED May 26, 2005 Final Order for the MWL Dump. The 5 year review is 2 ½ years overdue and NMED plans to delay another 5 years.
2. NMED should postpone approval of the Long-Term Monitoring and Maintenance Plan until after the 5-year review has been completed and a public hearing held.
3. A network of groundwater monitoring wells at the MWL dump that meets the requirements of the Resource Conservation and Recovery Act (RCRA). The network must be installed in both the fine grained sediments and the Ancient Rio Grande strata.
4. The New Mexico Environment Department (NMED) must treat the MWL dump as a “regulated unit” requiring Closure and a Post Closure Plan. This is required by 40 CFR 264.90 because the MWL Dump received waste after July 26, 1982.

## **II. Kirtland Air Force Base Aviation Gas and Jet Fuel Spill Require an Emergency Response that Has Not Been Forthcoming.**

Albuquerque has the largest underground chemical contamination threatening any city's drinking water aquifer in the history of the U.S. The spill is now estimated at 24,000,000 gallons, more than twice the Exxon-Valdez spill.

There is no regulatory emergency response to this spill after 13 years. Regulatory authority of the NMED has been politically compromised by AF Asst. Secty. Terry Yonkers and Gov. Martinez. Not a single gallon of jet fuel LNAPL has been removed since it was discovered floating on the aquifer in 2006. The jet fuel is now trapped beneath the water table and is dissolving into the aquifer. A miles long plume of Ethylene Dibromide (EDB) is traveling as an underground river of poison headed for our drinking water to bring kidney, liver disease and cancer.

1. There is no approved containment plan, no remediation plan, or ongoing effort to remove the liquid portion of the jet fuel (LNAPL) and the dissolved plume of EDB from Albuquerque's drinking water aquifer.
2. The ballyhooed Soil Vapor Extraction (SVE), thermal oxidizer and air sparging technology cannot remove the LNAPL or the dissolved EDB plume to keep it from moving further toward Albuquerque's municipal wells.
3.  $\frac{1}{2}$  teaspoon of EDB was in every gallon of the millions of gallons of spilled Aviation gas. Each  $\frac{1}{2}$  tsp can contaminate approximately 9,000,000 gallons of water.
4. The ethylene dibromide (EDB) and liquid jet fuel (LNAPL) plumes have been allowed to migrate almost completely off the Kirtland base into the city of Albuquerque toward the municipal wells.
5. The full size of the dissolved EDB plume is unknown and there are no groundwater monitoring wells close to the city wells. Monitoring the municipal wells is inadequate to determine whether the contamination is present in the drinking water right now.
6. The Agency for Toxic Substances and Disease Registry characterizes EDB breakdown in ground water as "hardly at all." The maximum contaminant level goal (MCLG) for EDB is zero. However, EPA set the MCL at 0.05  $\mu\text{g/L}$  because EPA believes, given present technology and resources, this is the lowest level to which water systems can reasonably be required to remove this contaminant should it occur in drinking water.
7. The Air Force "performance plan" is only for expensive studies.

**The Committee should draft a memorial that includes the following actions for the Kirtland aviation gas jet fuel spill:**

1. Immediate placement of groundwater monitoring wells as close as possible to the Ridgecrest municipal wells. The nearest monitoring well is 2,000 ft away.
2. Begin the investigation for technologies and installation of water treatment facilities for the municipal wells including financial assurance from the Air Force;
3. Emergency Remediation Response to halt the further movement of the liquid LNAPL jet fuel;
4. Plan for and install remediation technology now to address the long-term contamination of soils and the aquifer.