

US EPA ARCHIVE DOCUMENT

Daniel W. McKeel, Jr., MD
Final Comments
West Lake Landfill (WLL) Proposed Plan
December 29, 2006

I offer these final comments on the West Lake Landfill Proposed Plan to supplement my previous oral and written remarks having attended both public meetings. I remain convinced that the underlying scientific data is flawed and needs to be updated and reassessed. The best interests of the public, including protection of health and the environment, can only be served optimally by removing the radioactive waste to an off-site licensed hazardous waste facility. It is unwise, inappropriate and dangerous to leave the WLL rad waste in place. The proposed remedy does nothing to control radioactive seepage into the underlying groundwater and the aquifer with which it is in contact. I believe that a reassessment of the scientific data and adequate offsite groundwater monitoring will show that significant groundwater contamination has already occurred.

I fully support and endorse comments to be submitted by Mrs. Kay Drey and the Missouri Coalition for the Environment (Kat Logan-Smith, Executive Director).

The remainder of my concerns address the *deliberative process* by which a decision is being made about a remedy for WLL that will affect several generations more of St. Louis metropolitan area residents and businesses. Finally, I reflect on the *right course of action*.

[1] Involvement of St. Louis County

Following the second public meeting, I and a group of concerned citizen stakeholders met with St. Louis County Executive Charlie Dooley to discuss the County's position on the EPA recommended remedies under the WLL proposed plan. Below are the minutes I kept of that September 27, 2006, meeting that was attended by Honorable Wayne Goode, Kay Drey, Judy O'Connor, Henry Robertson, and myself in addition to Mr. Dooley and the directors of St. Louis County Health (Dolores Gunn MD) and Environmental Protection Services (Janet Williams).

WEST LAKE LANDFILL (WLL) MEETING
Briefing Points For St. Louis County Executive Charley Dooley
Honorable Wayne Goode, Kay Drey, Judy O'Connor, Henry Robertson, Dan McKeel MD
3:30 PM, Thursday, September 27, 2006

What we need

1. A letter from Mr. Dooley to Dan Wall, U.S. EPA region VII asking for the following:
 - a) An extension of the public comment time from October 14 for another 60 days;
 - b) Provision by EPA of technical expert/s to assist County with data analysis in several areas:

- (1) Groundwater monitoring data 2000-2006, discern trends and resolve serious discrepancies between existing characterization and monitoring studies;
 - (2) Detailed cost analysis of EPA preferred remedy 4 versus cost of remedy 6 to remove radioactive wastes completely and ship to Envirocare in Utah;
 - (3) Related to (2), the real costs of long term stewardship at WLL compared to DOE cost estimates for Weldon Spring Superfund site in St. Charles County (EPA estimate for WLL ~ \$100K/yr; DOE budgets ~\$1 Million/yr at WSS);
 - (4) Research existing technology solutions, such as temporary bldgs w/HEPA filters, at similar sites where fugitive dusts concern the public as a potential remediation problem.
2. Additional time for us to research and report on key regulatory issues including:
- a) The import of NRC radiological survey reports in 1982 and 1988; NRC landfill guidelines.
 - b) Assessment by ATSDR on the health effects of (1) *in place capping* versus (2) *total excavation and removal to Utah* (agency representatives attended the second public meeting);
 - c) A better definition of the position of MO DHSS on possible health effects of two remedies outlined in (2b) above.

Key Background Facts

1. Radiation causes cancer with no "safe" threshold; all international safety organizations agree;
2. WLL is surrounded by 17,000 workers at Earth City businesses, Hussman Refrigerator, 6th generation residents of an onsite farm and proposed winery, and residents of the Spanish Village subdivision of Bridgeton;
3. The Bridgeton City Council voted unanimously for total removal of WLL rad waste;
4. The magnitude of the total radioactive waste removal is doable: At WLL = 85 to 146K cu. yds. compared to 1.3 M cu. yds. removed to engineered cell at WSS and ~750K cu. yds. already removed at MCW, SLAPs, North County and Vicinity properties, with underground waste still to be removed;
5. Ground water and soil are contaminated by highly radioactive waste that poses **imminent danger** to nearby residents, farmers, businesses. GW has most likely migrated through the porous shallow alluvial aquifer into the Missouri River eight miles from where ~20% of St. Louis Countians obtain their drinking water. U.S. EPA and MO DNR assertions this has not occurred are repudiated by the fact that adequate offsite "sentinel" monitoring wells that could detect a migrating radioactive plume are non-existent.

Legal and Regulatory Issues (Henry Robertson, attorney, Great Rivers Environmental Law Center) [*Mr. Robertson has recently submitted separate comments to EPA about these issues*]

1. Classification of West Lake Landfill as solid waste, mixed waste, or hazardous waste
2. NRC guidelines regarding placement of radioactive wastes in landfills and proximity to water
3. Legal remedies if any of the PRPs default and withdraw from a remediation agreement
4. Does St. Louis County have any legal liabilities?

Background Facts and Site Chronology

- a) Potentially responsible parties (PRP, the "Respondents") are Cotter Corporation (N.S.L.), Laidlaw Waste Systems (Bridgeton), Inc., Rock Road Industries, Inc., and the United States Department of Energy (DOE).
- b) Uranium waste derived from very rich (60-70%) Belgian pitchblende ore originated at Mallinckrodt Chemical Works-Destrehan Street 1942-1955.
- c) Hot radioactive wastes trucked to Airport site and Latty Avenue. Some shipped to Niagara Falls Storage Site, Lewiston, NY and to Fernald in Ohio and returned to St. Louis.
- d) Cotter Corp. of Colorado reclaimed radium, and illegally dumped 47,000 cu. yds. of very "hot" barium sulfate and K-65 uranium and thorium residues at West Lake Landfill in 1973.
- e) 1982 and 1988 NRC radioactive waste characterization studies.
- f) U.S. EPA declared West Lake Landfill a National Priority List (NPL) site eligible for Superfund (CERCLA) remediation on 8/30/90 (ID# MOD079900932).
- g) 1996 McLaren/Hart Engineering characterization studies.
- h) 1996 (June 18) St. Louis Site Remediation Task Force report asks DOE to secure adequate funding for complete remediation of these sites. Funding still not in place in 2006.
- i) Remedial Investigation in 2000 by EMSI; many findings conflicted w/McLaren/Hart reports.
- j) Feasibility Study (OU1 = 478 + OU2 =155 pages) 2006.
- k) Proposed Plan with Alternate 4 for OU-1 preferred by EPA Region VII and MDNR.

- 1) Two public meetings in Bridgeton, >50% of time spent by EPA and MDNR presentations leaving public less than 2 hours to speak. Time equivalent to one public meeting two hours in length.

RESULT:

Dooley, Gunn, Williams will draft a request to EPA to extend 90 days "open dialogue" among parties. Dooley interested in process. Dooley doesn't like details, am an "amateur." Will rely on recommendation from his health department.

COMMENT:

Dr. Gunn kept claiming they had done their epidemiology studies with ZIP codes and she saw no problem with that approach. Gunn apparently did not know about or recognize the merits of using of Geocodes or mention case control studies, both of which I believe are required to define a potential health problem caused by WLL radioactive wastes. Williams did seem to understand that tracking the work force, who worked days and lived elsewhere, would be a problem at Earth City tracking using ordinary MO surveillance statistics. I gave them 8 x 10 color prints of my WLL July 9, 2006 photo session for informational purposes.

It was my distinct impression that the "open dialogue" meetings would be arranged soon after the meeting, and that I and the others with me would be present. Sadly, this did not occur. Mrs. Drey learned through Ms. Williams that EPA refused to meet with the County or us until after the public comment period had ended. The following facts were not clear as of 12/29/06: (a) Who did Ms. Williams contact at EPA and when did that occur? (b) Was Mr. Dooley informed that EPA was unwilling to meet? (c) Has St. Louis County submitted public comments to EPA? (d) Has EPA been re-contacted to schedule the "open dialogue" meeting with EPA?

On December 29, 2006, Mrs. Drey and I again tried to contact Ms. Gunn and Ms Williams by phone to answer the above four questions but were unable to do so.

I find it extremely disappointing that the promises of the September 27th St. Louis County meeting were not fulfilled. The discussions proposed then still need to take place. There was virtually no feedback to our group following the September meeting. It is difficult to understand EPA's refusal to meet and discuss and defend the scientific basis for their suggested "in place" capping remedy. It is my contention the meetings, had they occurred, would have *informed the Public Comments*. The time allocated for public comments was severely truncated (~50%) at both town hall meetings in Bridgeton by overly prolonged and duplicative and repetitive presentations by both MDNR and EPA. Thus our request for further discussions prior to selection of a final remedy at WLL is entirely reasonable and should be granted.

II. Doing the Right Thing for the Citizens of Missouri: Strict Imperatives

EPA has a strong obligation to fully explore and resolve scientific issues in fulfilling its primary mission to protect the public health and the environment. This moral and legal imperative is

embodied in the very name of the agency—the *Environmental Protection Agency*. I believe one of the main points raised in defense of in place capping as a remedy is false. That is, that extraction and removal offsite of the radioactive residues would release dangerous and *uncontrollable* particulate dust emissions into the air. Those types of concerns have been successfully addressed all around St. Louis and Southern IL in numerous federal cleanup operations: (a) under FUSRAP and USACE, at the St. Louis Airport site (SLAPS), at the ongoing St. Louis downtown site (SLDS) remediation taking place within an active work environment, and the Dow (Madison, IL) uranium cleanup in 2000 at yet another active work site, and (b) under DOE and CERCLA, and at the Weldon Spring Superfund site in St. Charles County and uranium removal at General Steel Industries site in Granite City, IL (DOE, 1994).

A recent (December 18, 2006) “Our View” *St. Louis Post-Dispatch* editorial on lead abatement was titled, “Weak Knees at the EPA.” The editorial decries the sublimation of scientific input throughout the regulatory decision-making process in favor of industry and places the blame squarely on the current Administration in Washington. The editorial concludes:

“This is another example of the Bush administration’s unabashed efforts to diminish, marginalize, subvert or suppress science that runs counter to its political agenda or the interest of industry. We’ve seen it in administration’s weakening of mercury and soot standards, in refusing to curb carbon dioxide emissions and in disregarding staff scientists views on Plan B birth control.”

WLL contains proven high levels of measured uranium (including U-235), thorium-230, actinium, protactinium and almost surely the obligatory daughter product polonium-210 that has recently garnered international media attention as a vehicle of poisoning leading to death. All of these highly radioactive substances are intermixed with dirt and debris at WLL. The landfill was never intended to be a hazardous landfill and is not operated as such. Spanish Village residents, a farm where a winery is envisioned for the near future, and 17,000 Earth City business employees sit adjacent to the rad waste landfill. A key background well, itself radioactively contaminated, is now under the Rams training facility. There is a strong business incentive not to alarm the public unduly. **This does not excuse the federal, state, County and City of Bridgeton officials from properly informing the citizenry of the real risks posed by leaving the WLL radioactive wastes in place for decades.**

That fiduciary responsibility still has not been fulfilled adequately by any of the responsible agencies. Additional groundwater monitoring to define the extent of an offsite radioactive plume needs to be done, the available monitoring data needs to be reviewed and reassessed by NRC and perhaps by an independent auditing entity (such as Pangea Group, for example), and the detailed costs of the various PP alternatives need to be disclosed and discussed in far greater detail. Existing epidemiologic data on possible adverse health effects of people living near WLL needs to be scrutinized. Right now, all we have is the word of the Director of St. Louis County Health that a health problem has not been identified. The merits and feasibility of a proper case control study need to be investigated. A final decision and remedy should not be decided upon by EPA until each and all of these actions have been carried out with sufficient time allocated for all

stakeholders to have input and try to reach consensus on the validity of the decision-making process and on the underlying scientific facts.

Respectfully submitted,

Dan McKeel

Daniel W. McKeel, Jr., MD
Associate Professor of Pathology and Immunology (retired)
Washington University School of Medicine in St. Louis
Southern Illinois Nuclear Workers (SINEW)

Mail:

5587-C Waterman Blvd.
St. Louis, Missouri 63112

Phone: 314-367-8888

Fax: 314-367-7663

E-mail: danmckeel2@aol.com