

EXTENDED COMMENTS ON WEST LAKE LANDFILL  
FLOOD PLAIN ISSUES & PUBLIC MEETING

-- Daniel W. McKeel, Jr., M.D., April 9, 2008 --

This comment will extend my oral remarks made to U.S. EPA Region VII at the Bridgeton, MO, public hearing on West Lake Landfill held on 3/27/08. The bolded portions represent my oral presentation at the meeting, while the not bolded text represents my extended comments for the written record.

WEST LAKE LANDFILL

Public Meeting 3/27/08

Dan McKeel Oral Comments

**Good evening – I am Dan McKeel, a retired Washington University School of Medicine faculty Pathologist. I have been involved with the West Lake Landfill Proposed Plan and ROD since June 2006 and have attended all of the EPA and MDNR-sponsored public meetings related to WLL remediation during 2006-2007. My previous remarks at these meetings supported another remedy from the “capping” remedy that EPA has selected. Rather, I advocate excavation of the radioactive wastes from WLL OU-1 areas 1 and 2, with transport out of state to a licensed federal facility.**

**I do not believe that Alternative 4 is fully protective of the public health and the environment for multiple reasons:**

ADDED COMMENT – The West Lake Landfill is not designed to safely contain radioactive wastes by any criteria of any regulatory agency (NRC, EPA, DOE, MDNR). Yet very hot nuclear weapons waste from Mallinckrodt Chemical Works Uranium Division was dumped there illegally by Cotter Corp. in 1973. The public was not protected from these wastes in any manner for the next 3.5 decades even though the WLL radionuclides were characterized by the early 1980s. This is truly shameful and represents gross negligence. Nearby residents in Spanish Village, daily workers at Earth City, and trash haulers employed at other parts of the landfill were placed at high risk. Now there is an opportunity to correct all of this by excavating and removing the rad waste to a licensed federal facility such as the representative from ENERGY

SOLUTIONS (merged with Envirocare) outlined at the 3/27/08 public meeting in Bridgeton. Yet a half-way remedy was selected that will fully protect no one.

**(1) Recent torrential rains and floods in ten Midwest states, that rivaled in intensity the 1982 and 1993 historic floods, clearly showed us that flood plain sites like WLL are in serious jeopardy. Such violent rainstorms can relocate radioactive soil within the confines of the landfill itself and cause runoff from the steep slopes. Next time the Missouri River may experience even more extensive flooding. This real danger has been marginalized by both EPA and MDNR and they have even disputed, without justification, that the landfill is actually located in a Missouri River floodplain. I find this fact to be astounding!**

ADDED COMMENT -- Not only is WLL not a licensed facility designed for radioactive waste disposal, it is in the Missouri flood plain, despite the nonsensical claim by EPA this is not so. WLL is protected by levees of a type that have recently been shown to fail during hurricane Katrina in New Orleans, during the floods of 1982 and 1993 in Missouri, and will certainly fail in the future – the question is not IF, but WHEN will the levee failure occur?

**(2) WLL is unlined and is not a hazardous waste landfill designed to contain radioactive waste.**

ADDED COMMENT – My research indicates that although some municipal landfills designed similarly to WLL do accept radwaste, the trend is towards reducing such dangerous practices. Murphreesboro, TN, for example, recently discontinued the practice appropriately citing safety concerns. Research revealed no U.S. hazardous waste landfills are licensed to accept radwaste of the WLL type.

**(3) Remediation of the very high levels of thorium-230 (117 pCi/gm) and other radioactive wastes from WLL soil has been delayed since 1973 when Cotter Corporation illegally dumped the materials in the municipal landfill.**

ADDED COMMENT – Addressed in introductory remarks. I must reiterate that everything I know about the nuclear industry, including interaction with the nuclear weapons legacy and current communities and workers therein, as well as with NRC and other agencies that regulate nuclear waste, tells me that EPA's endorsement and MDNR concurrence to leave the WLL rad waste in place violates good science, good sense, and the letter and spirit of safety guidelines for the public and the environment. Such decisions discredit both fine agencies, EPA and MDNR, and their very noble missions to above all protect the public health and safety and the environment.

Dan Wall's response to my question about the current role of the NRC in WLL was not satisfactory. He alluded to there being "a letter" at some time in the past from NRC to EPA saying it was OK for EPA to take over radiologic management of WLL. I call upon EPA to release and furnish a copy of this letter to me and to make it public as part of the OU-1 and OU-2 ROD. It should be part of this document. I question this non-involvement of NRC at WLL being cognizant of the situation at the former nuclear fuels plant in Hematite, MO, that is now owned by Westinghouse but built by MCW. The Court vacated a Consent Decree between Westinghouse, MDNR and Attorney General Jay Nixon's office because they had somehow overlooked NRC's claim that in Missouri, which is not an NRC agreement state, NRC has exclusive jurisdiction over management of radioactive wastes rather than MDNR. I won't believe Mr. Wall's assertion that NRC has no (zero) current role at WLL unless and until the letter he described from NRC to EPA is put into the public record where I and others can see it.

I also strongly object to EPA's repeated statements that minimize the risk of storing this particular rad waste, that contains progeny of Belgian Congo ore with 60-65% uranium. To do so is misleading to the public. This is detrimental to the public's safety and well being on several levels (medical and economic).

**(4) Adopting Alternative 4, by capping but not removing the WLL rad waste offsite, is shortsighted and merely delays solving this major environmental contamination problem.**

ADDED COMMENT – Capping remedy #4 is a temporary solution to the radioactive wastes at WLL. The cost to excavate and move offsite will rise as the years go by. EPA and St. Louis County Government, as well as MDNR, underestimates the fact that one day a major lawsuit will

probably be filed to force removal of the waste. That event will increase the cost of leaving the WLL waste in place enormously. I anticipate that with the next State and national elections looming, the regulatory climate to be "business friendly" at the expense of the public health and safety will change dramatically.

**(5) EPA and MDNR have misrepresented the difficulty of suppressing dust and other airborne emissions were the WLL rad wastes to be excavated and transported offsite. Portable buildings with negative pressure filters and other similar technologies are widely used and can fully protect the nearby residents of Spanish Village and the 17,000 people who work at Earth City.**

ADDED COMMENT – I regard this type of deliberate ignoring and misrepresentation of the facts by a knowledgeable federal agency with plentiful expert resources as a serious breach of the public trust. Anyone familiar with Superfund/CERCLA, FUSRAP and other hazardous waste remediation activities is aware that numerous technologies and well established operational strategies are available to safely excavate and remove dusty potentially airborne wastes from sites like WLL. Portable buildings and HEPA negative filtration units, exhaust fans and hoods plus protective personal gear for workers are in routine use throughout the country. EPA possesses this knowledge and should have made this known at the WLL public meetings. Not doing so invites the belief that EPA is biased towards the lowest cost option. It causes the public to not believe EPA, Gene Gunn and Dan Wall when they declare that "cost was not a factor in remedy selection." I and others believe that it clearly was.

An example of removal of dusty radioactive wastes was in 1993, when ERG of Albuquerque, NM removed over 800 rail cars full of radioactive magnesium-thorium sludge safely, without incident, from the old Dow Chemical site in nearby Madison, IL.

Mrs. Drey circulated to the WLL interested parties additional information about dust containment technologies for excavating wastes such as those at WLL. This information was ignored by EPA officials at the 3/27/08 public meeting. I hope it will be addressed in the Response Summary to this WLL OU-1 and OU-2 ROD.

**(6) A group of concerned citizens met with the St. Louis County Executive in September 2006 to express their concerns about WLL and the EPA-MDNR favored “capping” alternative. We were assured that talks would be initiated with US EPA Region VII, the lead agency, and that all those around the table would be party to this “open dialog” that the County Executive espoused. The Directors of the St. Louis County Departments of Health and Environmental Services attended the meeting. Nor has the St. Louis County Council stated their preferred WLL remedy.**

We were then told by the County Executive’s office that US EPA had refused to hold the promised talks until after the ROD had been issued. This made no sense to me.

ADDED COMMENT – Please see comment to item #7.

**(7) During 2007, our group tried to schedule repeated appointments to discuss the position of St. Louis County Government and the various WLL alternatives under the Proposed Plan. Officials were either unavailable or simply failed to appear at the scheduled times.**

ADDED COMMENT – Our treatment was rude beyond words. The facts speak loudly as to the true intentions of St. Louis County in this matter which is a deplorable hands off, we don’t want to get involved attitude. The County Executive promised that meetings would be held and a dialogue established about WLL issues among interested members of the public, St. Louis County Health and Environmental Services, and U.S. EPA Region VII, but this never materialized. It is extremely disappointing to learn that EPA allegedly, according to the County, refused to meet and talk until after the ROD was issued. What possible good would that do? None that I can see is the answer. Overall, way too little, too late would be the way I would characterize the actions of EPA and St. Louis County regarding WLL.

**(8) We then wrote to Mr. Askew, EPA Region VII director, concerning an announcement of the unusual issuance of the WLL ROD before new groundwater characterization studies had been undertaken. I asked when the new groundwater data would be made available to the public.**

ADDED COMMENT – The reasoning and facts offered in this letter were convoluted and not fully congruent with the facts as I know them. A source inside MDNR told a private citizen that “new groundwater studies” were to be undertaken as the primary reason the WLL ROD had been delayed. Mr. Askew’s letter implies that no new groundwater studies were done, and does not explain clearly why the ROD was delayed.

**(9) Finally, this meeting was held and the public comment period was reopened for a brief time, welcome news indeed.**

ADDED COMMENT –

(a) The information offered about the levee system was both interesting and, according to Mrs. Drey’s testimony, self-serving in that the original levee design was not approved by the Army Corps of Engineers. Rather it is a private levee system. The statement that I read into the record on 3/27/08 in Bridgeton from the 1990 EPA NPL narrative, to the effect that WLL lies in the Missouri River flood plain, abolishes the validity of the technical nit-picking by EPA and others that this is untrue. They are incorrect and the position that WLL is not in a flood plain is absurd given EPA’s own official description of the site.

(b) Missouri Senator Bond’s office was identified as a major reason the 3/27/08 WLL public meeting was held. A representative from the Senator’s office was present but chose not to illuminate those in attendance what the Senator’s concern about WLL being located in the Missouri River flood plain was based upon in greater detail. I am certain all present would have been interested in hearing such an explanation.

(c) I was frankly disappointed that the newly reassessed groundwater studies that I was led to believe had caused the delay in issuing the initial OU-1 and OU-2 ROD were not described at all at the 3/27/08 meeting. I say this even though I understand there will be a separate groundwater ROD at some distant point.

A major point of concern that I and others, including the Missouri Coalition for the Environment and Kay Drey, have often stated, is that WLL groundwater has already migrated offsite. EPA and MDNR dispute this fact that we believe is contradicted by existing WLL site data. For example, a background well once occupied the site of the current St. Louis Rams

Training Center in Earth City. That well had elevated radionuclides above accepted background levels for non-impacted sites that contain radioactive wastes.

EPA has maintained all along that radioactive waste at WLL is confined to the upper twenty feet of OU-1 areas 1 and 2 landfill mass. Thus, if as we contend, groundwater has been radioactively contaminated beyond the strict confines of WLL, then the selected capping remedy 4 is even less satisfactory. There is no barrier to impede the downward migration of the barium sulfate, thorium-230, polonium-210 and other rad wastes at WLL. This is true because WLL was designed like a municipal landfill rather than a hazardous waste landfill. Such hazardous waste landfills contain a double liner and a leachate collection system that facilitates routine monitoring of the contaminants from effluents in contact with landfill contents. This is not possible, nor is it done, at WLL that lacks a leachate monitoring system.

Engineered "disposal" cells that are designed to contain radioactive materials, such as the DOE structure that EPA Region VII and Mr. Wall oversee in St. Charles County, MO, have much thicker caps to contain radon emanation. Concerning radon at WLL, Mr. Wall seriously misstated the true facts about radon at WLL at the 3/27/08 Bridgeton meeting. In response to an audience question, Mr. Wall stated that radon was formed and was gone in three days due to decay. What is wrong with this, of course, is that radon gas is given off continually by a steady stream of coincident and successive radiologic decay events. Thus, radon escaping from WLL to the air is a constant occurrence and concern in the absence of an effective barrier. WLL has three feet, whereas the 45 acre Weldon Spring cap built by DOE at a taxpayer cost to the public of over \$900 million for active remediation, is 300 feet thick.

**My more extensive written comments will follow. Thank you.**

ADDED COMMENT -- My oral and extended written comments on WLL flood plain and related issues were submitted 4/9/08 via Fax/E-mail with hard copy to follow.

Respectfully submitted,

***DANIEL W. MCKEEL, JR., M.D.***

Daniel W. McKeel, Jr., M.D.

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

Phone: 314-367-8888 • Fax: 314-367-7663 • E-mail: danmckeel2@aol.com