Dear Dr. Gibbs:

Thank you for providing the U.S. Environmental Protection Agency with information you believe to be pertinent to your request for permanent relocation of residents who live near the West Lake Landfill Site (Site). We appreciate all of the input provided to us on issues that are of concern to you and the community.

I'd like to respond to the points raised in your letter regarding our relocation authority under CERCLA and contamination related to the Site. You are correct that the statutory definition of "remedial action" in CERCLA includes the costs of permanent relocation of residents and businesses and community facilities under certain circumstances, as noted in your letter. The National Contingency Plan also includes a reference to temporary or permanent relocation of residents, businesses, and community facilities as a possible method of remedying releases when the Agency determines that it is necessary to protect human health and the environment. Because permanent relocation is considered a remedial activity, from a legal perspective EPA would typically consider and select it only pursuant to the remedy evaluation process set forth in CERCLA and the NCP.

As your letter notes, the EPA on occasion has exercised this relocation authority at certain sites. In the history of the Superfund program, the EPA has implemented permanent relocations of businesses or residences at only 33 of the more than 1,600 final and deleted sites on the National Priorities List. Of those 33, the majority were for engineering solutions necessary to implement the cleanup remedy.

At the vast majority of Superfund sites, the EPA's remedial actions address site risks so as to enable site neighbors to remain safely in their homes and businesses, making permanent relocation unnecessary. The EPA has issued guidance and other informational materials about relocation and the Superfund program (http://www.epa.gov/superfund/community/relocation/). Our guidance clearly states that while relocation authority is provided for by CERCLA, the preference to keep people and businesses in place during a cleanup is consistent with Superfund statutory and regulatory requirements. In the rare instances where permanent relocation does occur, the primary reasons for doing so are to address an immediate risk to human health (where an engineering solution is not readily available) or where site structures (i.e., homes and businesses) are an impediment to implementing a protective cleanup.


By addressing your specific points about the Site risks, I hope you see why Region 7’s response actions to date make temporary or permanent relocation inconsistent with Agency authority and practice as well as with the scientific evidence. First, you raise several concerns regarding the subsurface smoldering event. While I understand the public’s concern about the movement of the SSE, at this time the EPA does not believe that the data collected thus far substantiates a conclusion that the SSE is moving toward the radiologically-impacted material. Even if the SSE came into contact with the RIM, based on the EPA’s understanding of the type of RIM and its distribution in Operable Unit 1, we do not believe it would become reactive or explosive at temperatures typically observed in a SSE. An SSE in OU-1, regardless of whether or not it comes into contact with RIM, would be expected to change the conditions within the landfill, and likely increase the rate at which landfill gases are released. We would anticipate an increase in release of gases from the landfill through surface cracks or fissures that may form. These gases could be released as steam, radon and potentially other gases (as determined by the composition of the non-RIM materials present). From what we know of the constituents of OU-1, particularly the RIM, we don’t expect any of the gases released to contain RIM material. We do expect radon to be released, as this is a breakdown product of the RIM in OU-1 and it is a naturally occurring gas from geological formations in our area. We know about the natural occurrence of radon based on data collected by the U.S. Geological Survey. Based upon the EPA’s understanding of SSEs, the release of any gases would be localized, and not occur over the entire Site. Should substantially different SSE behavior warrant additional actions, construction of a proper cap over the landfill would help reduce both short and long term risks to human health associated with any increased release of radon. The EPA is working with the Missouri Department of Natural Resources to collect additional information on temperatures, gases and subsidence that can be used to develop a better picture of trends and hence of movement of the SSE within the landfill and quarries.

In the interim, the EPA is currently evaluating the construction of an isolation barrier that will serve as a preventative measure to address the threat of an SSE coming into contact with the RIM. Decisions regarding the construction and location of an isolation barrier will be made in consideration of all response actions being evaluated for the Site to ensure that this interim action is complementary to the remedial action that will ultimately be performed. As such, any issues related to the SSE and isolation barrier that may impact the integrity of the remedial action taken at the Site will be evaluated by the EPA.

Second, the available scientific data indicates that people living near and working outside the boundaries of the Site are not currently being exposed to contaminants released from the Site that are above levels of concern. The EPA’s ASPECT overflight of the Site and nearby residential and commercial/industrial properties in 2013 detected no off-Site excess gamma emissions in surface soil anywhere off-Site, and only on-Site in one small area of OU-1 Area 2 as previously identified in the Remedial Investigation. Off-Site groundwater sampling by the USGS and the EPA of privately-owned wells to the northwest and southwest of the site in 2013 revealed no radionuclide exceedances of drinking water standards, and to our knowledge there is no use of private wells in the area for drinking water. The MDNR conducted soil sampling in 2005 along St. Charles Rock Road, Boenker Road and Taussig Road just outside Site boundaries and did not detect uranium, thorium, or radium above the cleanup standards established for the FUSRAP sites. In addition, the EPA’s 2014 Bridgeton Municipal Athletic Complex sampling found no exceedances for uranium, thorium, or radium. Lastly, as you reference in your letter, the MDNR air data indicated detections of sulfur dioxide above levels of public concern in early October 2014. However, as stated in the “DHSS Follow-Up Review of Air Monitoring Data from the Bridgeton Landfill Area, September 29 – October 2, 2014”, during this time the monitors were
experiencing fluctuations, potentially due to weather conditions, and winds were predominantly from the south rather than from the direction of the landfill.

Region 7 continues to study, select, and implement a necessary remedial action. The Agency’s assessment of current and future risks to individuals on-Site is detailed in various technical documents that support the 2008 Record of Decision and our current evaluation of the remedy. As stated above, the primary reasons for including permanent relocation as part of a CERCLA remedial action would be to address an immediate risk to human health, or where site structures are an impediment to implementing a protective cleanup. While the EPA continues to diligently work to evaluate the 2008 Record of Decision and any necessary interim response actions to address the risks posed by the Site, at this time Region 7 does not believe Site data warrants consideration of permanent relocation. This Agency will continue to evaluate all data related to the Site, and consider all appropriate remedial alternatives as required by CERCLA.

Sincerely,

Karl Brooks