

Case Study: Responding to a community-wide environmental health issue: plutonium-contaminated sewage sludge in Livermore

Abstract: From 1958 to 1976, residents and municipalities picked up sewage sludge from the Livermore sewage treatment facility for use as a soil amendment. During this time period frequent releases of plutonium from the Lawrence Livermore National Laboratory (LLNL) to the sanitary sewer occurred, resulting in contamination of the sewage sludge. There is information on how much plutonium was in the sludge during portions of the time period, however substantial gaps in the information remain.

The typical approach used by government in addressing the potential health threat from exposure to a toxic substance like plutonium (or other chemicals), is to determine whether the level of contamination presents an unacceptable risk, based on regulatory standards. Some of the challenges in addressing the issue include, significant gaps in the historical information, a lack of public awareness and debate on “acceptable risk”. Rather than make assumptions for the community on “acceptable risk”, the California Department of Health Services (CDHS), in partnership with community based organizations and local government developed a process based on community outreach/awareness and precautions measures to avoid unnecessary health risks from the sludge.

The presenter will provide a brief overview of the historic distribution of sewage sludge, which will be followed by a group exercise. Participants will be asked to provide input on ways they believe the sludge issue should/could be addressed in an ethical and community sensitive manner.

Biography of Presenter: Tracy Barreau, REHS, is an Environmental Scientist with CDHS, Environmental Health Investigations Branch. She has worked for the past eight years evaluating health impacts to communities living near hazardous waste sites. For example, Ms. Barreau has worked on issues concerning dioxin and PCB contamination in fish, exposures to air emissions from chrome plating facilities, and exposures to soil and groundwater contamination. In collaboration with citizen groups, community members, the City of Livermore and Alameda County she conducted an investigation into the historic distribution of plutonium-contaminated sewage in Livermore.