Abstract

Vapor intrusion is an environmental health hazard caused by the influx of volatile chemicals from the subsurface that eventually contaminate the indoor air in overlaying buildings. This often overlooked exposure pathway of hazardous chemicals is a significant environmental health hazard. The EPA estimates that there are 374,000 contaminated sites in the United States that could potentially be sources of vapor intrusion. Local planners and the planning process are important and necessary during land use decision-making to prevent, identify and mitigate vapor intrusion problems. Planners are the critical link between land use decision makers and other stakeholders involved in protecting human health, safety, and welfare from vapor intrusion in their community. The planning process functions as the communication system that coordinates the knowledge and activities of various stakeholders, planners, and decision makers. This research focuses on how information and knowledge about environmental health hazards are communicated to, understood by, and used by local planners during the planning process when redeveloping land with historical and existing hazards. The research involves a case study of current redevelopment efforts at a site where there is both a closed hazardous waste landfill and a municipal waste landfill undergoing closure in Los Angeles County, California. The potential for vapor intrusion has been addressed at this site in the context of monitoring requirements imposed on local redevelopment plans. Experiences and lessons learned at this site may help other communities confronted with similar situations.