



At a Glance

Catalyst for Improving the Environment

Why We Did This Review

We conducted this review to evaluate issues and concerns raised by an environmental group and other concerned citizens regarding the potential for exposure to hazardous substances in McFarland, California. This case was transferred from the U.S. Environmental Protection Agency's (EPA's) former National Ombudsman in April 2002, when the EPA Administrator assigned the Ombudsman function to the Office of Inspector General.

Background

During the 1980s, residents of McFarland noticed health problems that they attributed to water, air, and soil contamination. A study by State and county officials concluded that McFarland had unusually high rates of cancer, but no causal association could be made between health data and the contaminants identified during sampling. EPA's National Ombudsman recommended that EPA conduct comprehensive environmental studies.

For further information, contact our Office of Congressional and Public Liaison at (202) 566-2391.

To view the full report, click on the following link:
www.epa.gov/oig/reports/2006/20060928-2006-P-00041.pdf

Review of Environmental Concerns at McFarland, California

What We Found

EPA developed preliminary remediation goals for McFarland using a lifetime residential exposure assumption of 30 years based on Agency Superfund guidance. We believe a 70-year exposure assumption may be more appropriate where there are multiple contaminants and multiple exposure pathways. We believe that this more accurately reflects the intent of the National Contingency Plan to be more protective under such environmental conditions.

EPA appears to have conducted air and soil sampling activities appropriately. However, when analyzing drinking water sampling results, Region 9 did not consider the synergistic effects of multiple contaminants and multiple exposure pathways due to limited available information on such effects. A new arsenic Maximum Contaminant Level was not effective until January 2006; thus, it is too early to determine whether the States are properly implementing it. The Region is helping States to acquire funding to install treatment systems and is conducting training on new treatment technologies to help them meet the new standard.

Region 9 exceeded requirements in its efforts to keep the McFarland community informed, but can take some actions to further strengthen community relations.

What We Recommend

We recommend that the Office of Research and Development identify and provide public access to sources of information on the toxicology of contaminant mixtures that may be found in drinking water, and continue to support research characterizing the joint toxic action of contaminants in drinking water. That Office generally agreed with the recommendations in our draft report, but suggested minor revisions, with which we generally concurred. We also make several suggestions for Region 9 to consider. The Region should provide an explanation for not using a 70-year lifetime exposure assumption when issuing preliminary remediation goals for specific sites, including McFarland. It should also provide an explanation for not using a lifetime excess cancer risk level of 1 per every 1,000,000 residents in setting preliminary remediation goals for water that could be used as a drinking water source where multiple contaminants are present.

Region 9 disagreed with our interpretation of the National Contingency Plan. We continue to believe a 70-year exposure assumption and a lifetime excess cancer risk of 1 per every 1,000,000 residents may be more appropriate where there are multiple contaminants and exposure pathways, such as at McFarland.