

US EPA ARCHIVE DOCUMENT

## **Skewed Riskscapes and Environmental Injustice in St. Louis and Seattle**

*Troy D. Abel*

*Department of Environmental Studies, Huxley College of the Environment,  
Western Washington University, Bellingham, WA*

**Objective:** This paper presents a case study of Toxics Release Inventory (TRI) air emission risks across metropolitan St. Louis, Missouri, and Seattle, Washington.

**Methods:** This study first presents a conventional analysis of the spatial patterns of TRI facilities and their surrounding census block group demographics for the St. Louis Metropolitan Statistical Area and the city of Seattle. Second, the use of a risk characterization analysis for 268 manufacturers and their air releases of more than 126 toxic air pollutants leads to more practical resolutions of urban environmental injustices. Third, longitudinal analysis in Seattle also illuminates how inequitable development and gentrification exacerbate environmental injustices.

**Results:** Spatial concentrations of minority residents averaged nearly 40 percent within 1 kilometer of St. Louis TRI sites compared to 25 percent elsewhere, but 10 facilities were responsible for 70 percent of the region's relative risk. In Seattle, cluster analysis reveals a concentration of risk and inequitable development, making the city's most socially vulnerable neighborhood even more vulnerable.

**Conclusions:** This disproportionate concentration of some of the greatest pollution risks would never be considered in most conventional environmental justice approaches. Not all pollution is created equally and, at the very least, the very worst toxic pollution and the trends concentrating it in the most socially vulnerable neighborhoods deserve more attention among policy analysts and practitioners crafting environmental injustice remedies.