

# Taking Action: How Community Residents' Positionality, Trust in the Government, and Risk Perceptions affect Advocacy in the Superfund Process

Alyssa Miller

Faculty Mentor: Dr. Danielle C. Rhubarb

*This project received funding from The Dean's Summer Fellowship Program*

**Introduction:** A Superfund Site is a contaminated area designated by the Environmental Protection Agency (EPA) that poses a risk to human health and must be cleaned up and remediated. Not only can a Superfund Site's contamination affect residents' health, but it can also jeopardize their property value and community life. Drawing on the human rights framework, international doctrines, and peer reviewed research, this poster proposes a conceptual framework for how residents' social positionality, perceived risk, and trust in government could influence a community member's ability to take action around such Superfund sites. This review of the literature is framed within the context of an underfunded and understaffed program which has resulted in a backlog of contaminated sites that require remediation. The findings from this literature review are contributing to a broader Environmental Justice in Greater Old North Dayton research project led by Dr. Danielle Rhubarb which is focusing on three of the currently six Superfund sites within Dayton, Ohio. This poster will end with a brief snapshot of how these findings shed light on the survey findings from that project.

## Superfund Site Clean-up Process

1. Preliminary Assessment/ Site Inspection
2. National Priority List Process
  - Valleycrest Landfill (1994)
  - Behr Site (2009)
  - Valley Pike (2016)
3. Remedial Investigation/ Feasibility Study
4. Proposed Plan
5. Record of Decision
6. Remedial Design/ Action
7. Construction Completion
8. Post-Construction Completion
9. National Priority List Deletion
10. Reuse

Valley Pike (currently)

Behr Site (currently)

Valleycrest  
Landfill  
(currently)



## Why Should We Be Concerned?

The EPA is underfunded → slower clean-up process

A Superfund's presence has personal and communal consequences including on:

- Health: Exposure to toxic chemicals which can lead to serious illnesses
- Neighborhood flourishing: Lower housing value and lack of commercial investment

These circumstances risk violating fundamental human rights and internationally agreed-upon goals.

- Sustainable Development Goals
  - 3.9: To reduce illnesses caused by contamination
- Universal Declaration of Human Rights Violations
  - Article 19: Right to knowledge: People who are female, under the age of 50, and are home renters are less likely to have knowledge about the Superfund sites
  - Article 25: Adequate living environment

## Proposed Conceptual Framework

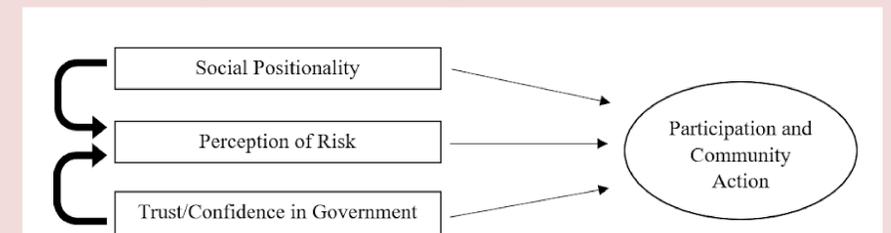


Figure 2: Factors affecting participation in and community action around Superfund sites.

My literature review found that females, people of color, and lower SES residents have greater perceived risk of hazardous sites. More so, they tended to have less trust in the government when residents believe the site's information has not been adequately presented. Therefore, residents with these factors tended to have increase community participation.

Results from Dr. Rhubarb's 2019 Survey of 3 neighborhoods in Dayton OH that are home to Superfund sites provide initial support for the following:

- **Social positionality:** People who are renters, college educated, identify as liberal, and have children are all more likely to get involved
- **Perception of risk:** There is an inaccurate knowledge regarding the risk implications that each site possesses
- **Trust/ confidence in government:** Most residents reported at least some trust in the Ohio EPA and scientists/ researchers and there is a significant lack of trust in large corporations or businesses within residents' communities

## EPA's Tools for Community Involvement

- Technical Assistance Grants: To help residents better understand technical aspects of the site and process
- Community Advisory Groups: Group of residents who will serve as representatives to communicate with EPA

## Review of the Literature

In reviewing the literature, I found that local residents participation in community action around these sites to help protect their rights is dependent on a wide variety of factors. The results of this literature review provide the basis for a conceptual framework.

### References

1. EPA. (2018). EPA Sites in Dayton. Retrieved from <https://www.epa.gov/oh/epa-sites-Dayton>.
2. EPA. (2018). Superfund Technical Assistance Communities. Retrieved from <https://www.epa.gov/superfund/superfund-technical-assistance-communities>.
3. EPA. (2019). Superfund Community Advisory Groups. Retrieved from <https://www.epa.gov/superfund/superfund-community-advisory-groups>.
4. Rhubarb, D. C. (2020). *Environmental Justice and the EPA Superfund Program: A Fundamental Cause Approach to Disparities in Knowledge of Health Risks*. PowerPoint, Dayton, OH.
5. Rhubarb, D. C. (2020). *Greater Old North Dayton and Riverside Superfund Sites Community Questionnaire Results*. Dayton, OH.
6. United Nations. (1948). Universal Declaration of Human Rights. Retrieved from <https://www.un.org/en/universal-declaration-human-rights/>.
7. United Nations. (2015). Sustainable Development Goals. Retrieved from <https://sustainabledevelopment.un.org/post2015/transformingourworld>.
8. Wikipedia (2020). EPA Logo. Retrieved from [https://en.wikipedia.org/wiki/United\\_States\\_Environmental\\_Protection\\_Agency](https://en.wikipedia.org/wiki/United_States_Environmental_Protection_Agency).