

# Safer Janitorial Products in Phillips Community

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UNIVERSITY OF MINNESOTA

Driven to Discover<sup>SM</sup>

# Company Background



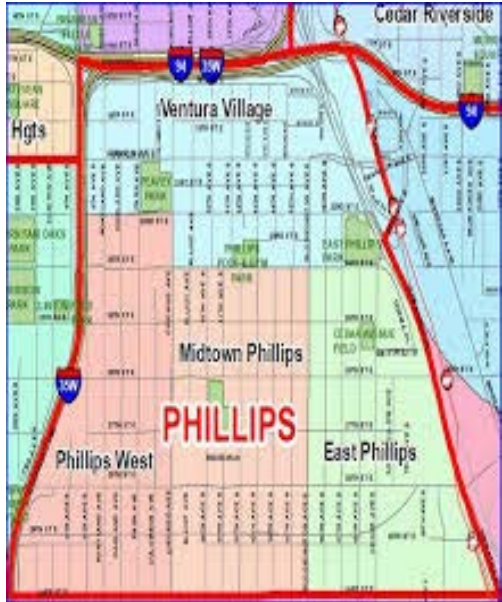
Non-profit organization, founded in 1977

- Improvement without displacement
- Affordable housing
- Community empowerment and leadership development

Project Partners:

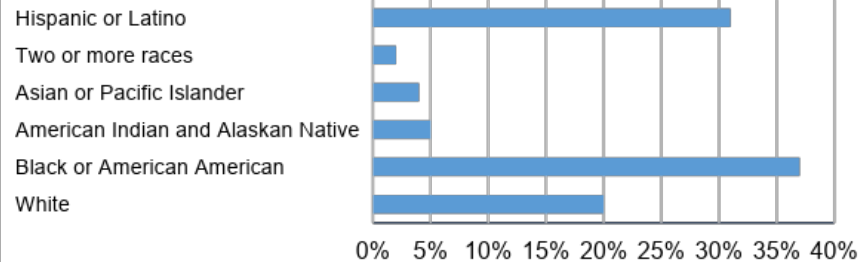


# Community Overview



Source: Minnesota Compass

Population by Race or Ethnicity, 2016



- **37.9% of residents born in a foreign country**
- **55.1% speak a language other than English**

# Project Overview

- Reduce Hazardous Air Pollutants (HAPs) and Volatile Organic Compounds (VOCs) emissions that degrade local air quality.
- Reduce worker and resident exposure to hazardous chemicals, that impact human health.

Multi-Family Housing  
Complexes

Commercial  
Buildings & Small  
Businesses

Residents

# 1. Outreach & Community Engagement

## Business and Property Owners

**37 businesses contacted**

**15 participants**

- Small businesses
- Office and commercial spaces
- Apartments
- Transitional Housing Organizations

## Community Members

**Article in *The Alley* newspaper**

**Table at Open Streets festival**

**Presentation at Mercado Central**

**Neighborhood Association Meetings**



## 2. Survey of Janitorial Products

Collect information on types of products, usage, and suppliers

- **Wide range of products and suppliers**
  - 133 products assessed
  - 84 products met the criteria to be safer products
- **Common products:**
  - Bleach
  - Glass Cleaners
  - Toilet Bowl Cleaners



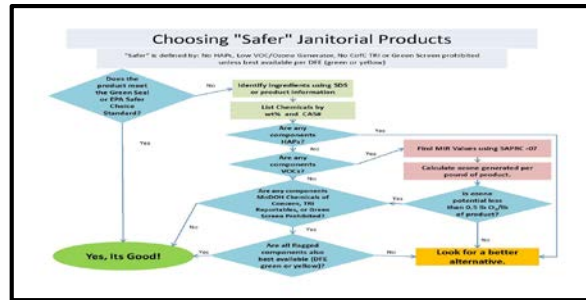
# 3. Assessment of Janitorial Products

- Environmental Impact: HAPs, VOCs, ozone generation
- Impact on Human Health: Chemicals of Concern, TRI Reportable
- EPA Design for the Environment (DfE) Classification
- Third-party certifications:



# 4. Identify Safer Alternatives

- Do not contain HAPs, Chemicals of Concern
- Generate less than 0.5 pounds of ozone per pound of product
- Green Circle or Yellow Triangle on the EPA's DfE list, which signifies that it is a best available chemical





# Results

## Business Engagement

- 9/15 businesses switched to safer products (5 businesses in progress)
- 21 products and 1,800 pounds of product switched to safer products

## Resident Engagement

- Presentation for restaurants and food vendors at Mercado Central
- 85 residents received a list of safer products available at local stores and 3 businesses will distribute the list to future residents/customers

## Air Emissions Reductions

- 30 lbs. HAPs removed per year
- 60 lbs. VOCs removed per year
- 145 lbs. Ground-level ozone per year

# Wrap-up

- Ability to communicate and coordinate with multiple people
- Independent project management
- Combination of analytical and communication skills
- Spanish as an asset
- Enjoyed working with the community and inspired by the work being done at Hope

