

CAIP Activity Analysis

Activity: Use clean diesel technology and hybrid buses in Phillips Community

Impact/Benefit

- Emission reductions from that type of source (While it is not necessary (and may not be possible) to quantify the emission reductions, quantitative estimates may be more useful than purely qualitative estimates (large medium or small))

Depending upon the combination of equipment and the pollutant measured, each retrofit will guarantee a minimum reduction of between 25% and 50%.

- Number of similar sources (large or small number) for example, there are a lot of vehicles in the communities, but probably a relatively small number of outdoor wood boilers.

List of possible vehicles to retrofit: school buses, Met Council buses, delivery trucks, garbage trucks and construction vehicles. Most buses (school and Met Council are retrofitted or pretty clean as it is). Most Delivery trucks are not just used in the Phillips Community and therefore, the entire fleet would need to be retrofitted in order to have an impact.

Construction equipment is generally short term and temporarily in the community. Garbage trucks are the likely target because they are frequently operated in the community and spend a considerable amount of time there. Therefore, the number of vehicles to retrofit is relatively small.

- Severity of the impacts to be mitigated

Diesel emissions are widely regarded as a major risk driver in metropolitan areas.

- Visibility of the impacts. For example, the unique paint jobs of hybrid buses makes them more visible, whereas clean diesel buses produce significantly fewer emissions than standard buses but are less visible.

Low to moderate visibility

Visibility could be improved by displaying signage (a sticker) indicating that the vehicle is a cleaner vehicle. Visibility could also be improved by advertising (MEI currently promotes its efforts).

- Plan

Work with waste haulers to reduce emissions of garbage trucks

Work with Met Council to increase the number of hybrid buses (there may be an opportunity to increase funding for clean mass transit under the economic stimulus laws)

Work with local distribution centers to deploy auxiliary power units for stationary vehicles that need power

Implementability

- General feasibility (easy, difficult)

Easy to implement for some vehicle types more difficult for others

- Cost of implementing (financial and labor)

High capital costs for retrofits, low operation & maintenance costs

- Need for additional funding, list of possible funding sources

Funding is needed, possible sources include: EPA, State of Minnesota, Federal Highway Administration

- Recommendation on how to and who should pursue funding

MEI, MPCA, Met Council, Minneapolis

- Labor required and available to implement activity (volunteer or professional labor)

Professional

- Timeframe to implement (one-time or on-going)

On-going

Ripeness for action

- | | |
|---|-----|
| • This activity can be initiated immediately | yes |
| • This activity needs funding | yes |
| • Funding for the activity can be secured immediately or soon | yes |

Recommendation:

Implement as-soon-as-possible