

Activity:
Pollution from Gasoline Lawn Mowers in the Phillips Community
Presented by Emily Moore & Robert Albee

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))

Medium: Many of the gasoline engines on lawn mowers are two-cycle, where gasoline and oil are mixed together. The emissions are much greater than four-cycle engines and do create a level of pollution.

- *Number of similar sources.* Lawns are smaller than for other places; many are managed by lawn care companies. With the large number of rental units (87%) in the Phillips Community, there are fewer lawn mowers than in neighborhoods where there are a larger number of single family homes.
- *Severity of the impacts to be mitigated.* The air emissions from small mowers are significant, yet not operating all at the same time. This tends to minimize the impact, but when combined with all of the truck, bus and automobile emissions on Lake Street, Hiawatha Avenue, Interstates 94 and 35W, combined with the traffic on city streets in the neighborhood, there is a significant amount of pollution.
- *Visibility of the impacts.* Not very visible
- Plan

Implementability

- *General feasibility* (relatively easy) Given the small number of large landlords, it is possible to effect significant change with just a few companies that provide lawn services to the multiple units and businesses in the Phillips community. However, there is only one commercial mower that is electric that we have seen. How long it takes to charge them is a big question. There is an excellent choice of corded electric and battery-powered mowers that are available for the smaller lawns of single-family households. They are much quieter and are quite efficient at providing a more manicured lawn. In addition, there are reasonable push mowers that use nothing but human power. They are surprisingly easy to push, but need more skilled adjustments to maintain a well-mowed lawn.
- *Cost of implementing* (financial and labor) The cost of the lawn mowers is the only significant cost – It is too bad that we cannot organize youth with electric mowers to offer reasonable services to members of the community. The cost of maintenance of these electric mowers can be much lower than those that are powered by gasoline.

- *Need for additional funding, list of possible funding sources* It will need funding. Sources: A ten thousand dollar grant would really help get something started. If you can have Hour cars, why not Hower Mowers?
- *Recommendation on how to and who should pursue funding.* Funding could come from MPCA as a pilot study...
- *Labor required and available to implement activity (volunteer or professional labor).* Volunteers from each of the four neighborhoods could serve as coordinators and volunteer their time. Perhaps youth service organizations could serve as sponsors to get the young people doing outreach within the community, possibly serving those elders who cannot provide their own upkeep of their yards.
- *Timeframe to implement (one-time or on-going)* If it could be accomplished, maybe the Green Institute would sponsor the program. We would need a secure storage area for the mowers and somebody to check them out, but if we can figure it out for a car, you should be able to figure it out for a lawn mower... Generally one-time funding if the mowers stay in the community...

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 | Do not know |

Recommendation:

Give consideration or study the idea as-soon-as-possible; implement as resources become available.