

Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300 * 800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

January 6, 2017

Ozone and PM Advance c/o Laura Bunte, Mail Code C304-01 109 TW Alexander Drive Research Triangle Park, NC 27711

RE: 2016 Minnesota Ozone Advance and Particulate Matter Advance updates

Dear Ms. Bunte:

The purpose of this letter is to provide the annual update on Minnesota's participation in the U.S. Environmental Protection Agency's (EPA) voluntary Ozone Advance and Particulate Matter (PM) Advance Programs.

The Minnesota Pollution Control Agency (MPCA) submitted the *Final Report: A Collaborative Plan to Reduce Emissions* (Report) from Minnesota's Clean Air Dialogue as our path forward in May 2013. The 24 recommendations in the Report have served to direct many of the non-point air pollution emissions reduction efforts of the MPCA and our partners as part of our participation in the Ozone and PM Advance Programs. The MPCA has many projects and programs to achieve voluntary emissions reductions from non-permitted sources. This annual Advance report will focus on those projects that have been part of the Clean Air Minnesota (CAM) collaborative effort.

Highlights from this year's work on Ozone Advance and PM Advance projects include:

- Awarded \$160,000 in grant funding to reduce volatile organic chemical (VOC) emissions at small businesses, with particular emphasis on selecting projects in communities of concern for environmental justice.
- Implemented grants to retrofit, repower, or replace old diesel trucks and construction equipment.
- Replaced two old, dirty tugboat diesel engines.
- Developed Learn Before You Burn outreach materials to help Minnesotans understand the impacts of backyard fires.

The MPCA and our CAM partners are continually looking for new, innovative, and cost-effective ways to achieve emissions reductions from sources not traditionally permitted by the MPCA. New pilot projects that we have begun implementing and hope to more fully roll out in 2017 include:

- Parts washer partnership Partnering with a service provider to give a 25% discount to small businesses when they switch out their solvent parts washers for water-based versions.
- Wood-stove change out program Providing financial incentives to replace older, dirtier woodburning equipment with cleaner technology.
- High-emitting vehicles repair program Providing free emission-control vehicle repairs for lowincome Minnesotans.

Ms. Laura Bunte Page 2 January 6, 2017

In all areas of our work, the MPCA is striving to advance environmental justice in Minnesota. We are working with our CAM partners to incorporate equity considerations into our initiatives and to focus emission reductions in lower-income communities and communities of color. This effort will continue to be a focus for the MPCA and our partners in 2017 as we look to improve how we address environmental justice as part of CAM's work.

Non-point air pollution reductions and the work we do with our Clean Air Minnesota partners are key priorities for the MPCA. Addressing emissions from non-permitted sources is one of five air quality-related strategies incorporated into the MPCA's 2012-2017 strategic plan. Our strategic plan lays out the goals and actions we as an agency plan to take in our work towards our mission to protect and improve the environment and enhance human health.

We continue to find the Ozone Advance and PM Advance structure a useful tool as we move forward in our efforts to find new and innovative ways to achieve voluntary emissions reductions across the state. We look forward to continuing work with our partners and making further progress on our emission reduction initiatives and education efforts. If you have any questions, please contact Amanda Jarrett Smith of my staff at 651-757-2486 or amanda.smith@state.mn.us.

Sincerely,

J. David Thornton Assistant Commissioner

JDT/AJS:ds

Attachment

2016 Minnesota Ozone and Particulate Matter Advance Programs Update

Introduction

Overall air quality in Minnesota has been improving over the past 20 years and Minnesotans expect the air to be clean, clear, and healthy for all to breathe. In that spirit, the Minnesota Pollution Control Agency (MPCA) joined the U.S. Environmental Protection Agency's (EPA) Ozone Advance and Particulate Matter (PM) Advance Programs in 2013, to continue to improve the air and protect the health of all Minnesotans. This report provides an update on the work that the MPCA and its partners are doing towards the goals of the Advance Program.

National Ambient Air Quality Standards

The Clean Air Act requires the EPA to set National Ambient Air Quality Standards (NAAQS) for common pollutants that are considered harmful to public health and the environment. The Clean Air Act requires that the EPA reexamine each of the NAAQS every five years to ensure they still reflect the most up-to-date scientific knowledge on the health and environmental impacts of the pollutants. In recent years, the NAAQS have gotten more and more stringent as science has come to understand that air pollutants have health impacts at lower and lower levels.

Each time the NAAQS are revised, the air quality across the country is reviewed to determine where the air is in compliance (attainment) with the standard and where it is not in compliance (nonattainment) with the standard.

Two of these pollutants of most concern in Minnesota are ozone and particulate matter. Minnesota is in attainment for both the ozone and particulate matter NAAQS, but strives to continue to improve air quality in the state in order to protect the health of our most vulnerable people and to avoid the possibility of future nonattainment of the increasingly stringent NAAQS.

Air pollution in Minnesota

Over the last 20 years, as a result of controls put in place under the Clean Air Act, annual air pollution emissions in Minnesota have decreased by nearly 50 percent. Among all sources, the greatest reductions have been achieved by power plants, with emissions falling by nearly 70 percent between 1990 and 2014 (see Figure 1 on next page).

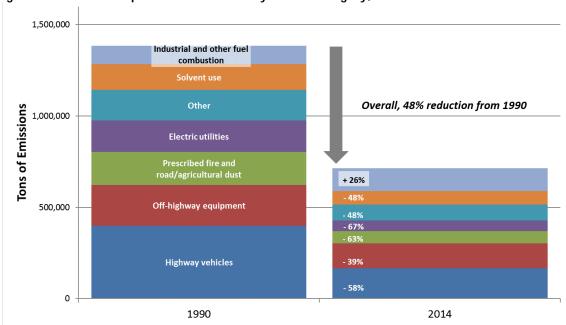
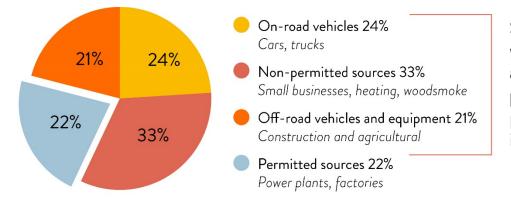


Figure 1: Trends in air pollution emissions by source category, 1990-2014¹

Source: EPA Air Pollutant Emissions Trend Data, 2016

Typically, when people think of sources of air pollution, they think about buildings with big smoke stacks like power plants and factories. Yet these sources make up a relatively small proportion of air pollution emissions in Minnesota (see Figure 2). Today, most of the air pollution in Minnesota comes from smaller, more widespread sources called "nonpoint" sources. Minnesota's emissions inventory shows traditionally permitted sources of air pollution only contribute about a quarter of overall emissions of several of the regulated air pollutants of major concern in the state.

Figure 2: Overall air pollution sources by type, 2011



Small and widespread sources are the largest portion of overall air pollution emissions in Minnesota

Most of the air pollution in Minnesota comes from activities at our homes and local businesses. These smaller, more widespread sources include a large variety of activities, businesses, and equipment. Individually, sources like auto body

Includes emissions of VOCs, SO2, NOx, and directly emitted fine particles ($PM_{2.5}$)

¹ See EPA National Emissions Inventory (2016): <u>https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data</u>

shops, gas stations, and home heating and air conditioning systems may not produce much pollution, but combined, they make up a third of all air pollution emitted in Minnesota.

Vehicles and the equipment we use for recreation, agriculture, construction, and other work and pleasure activities are also widespread. Like the small but common sources at our homes and businesses, vehicles and other equipment often emit pollution close to where we live, work, and recreate, meaning we may be exposed to high levels of pollution from these sources. Vehicles and other equipment each make up about a quarter of the emissions in Minnesota.

The large number of these sources and the small size of their individual emissions makes it difficult to regulate them through traditional permitting. Because of these challenges, the MPCA works with a variety of partners including industry, communities, and non-governmental organizations to achieve voluntary emissions reductions from these small, widespread sources, both vehicles and equipment, and homes and businesses. For these reasons, non-point sources of air pollution are the focus of Minnesota's Advance Program efforts.

Advance Program

The Advance Program is a voluntary program that encourages state and local governments to reduce ozone and particulate matter pollution in areas that are attaining the NAAQS for those pollutants. The program provides technical support for state and local governments that wish to proactively address air pollution in their area.

Advance in Minnesota

Minnesota joined the Ozone and PM Advance Programs in 2013 to receive support from EPA in its efforts to reduce concentrations of ozone and PM in the state. In 2012 and 2013 the Minnesota Pollution Control Agency (MPCA) participated in a series of conversations with leaders from the business, government, and nonprofit sectors to explore opportunities for proactive, voluntary emissions reductions in the state. This collaboration, called the Clean Air Dialogue, produced the *Final Report: A Collaborative Plan to Reduce Emissions* (Report), which the MPCA submitted as our path forward in May 2013.

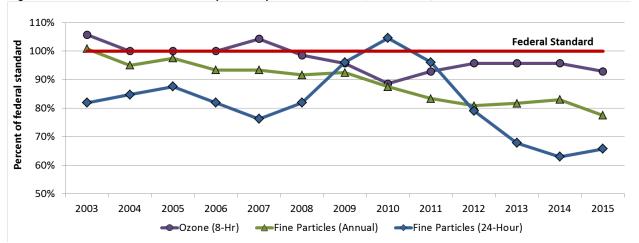
The 24 recommendations in the Report have served to direct many of the non-point air pollution emissions reduction efforts of the MPCA and our partners as part of our participation in the Ozone and PM Advance Programs. Clean Air Minnesota (CAM) developed from the initial Clean Air Dialogue effort. Clean Air Minnesota is a collaboration among businesses, nonprofits, and governments and serves as the stakeholder group for our Ozone and PM Advance efforts. The collaboration is convened by Environmental Initiative (a 501c3 nonprofit organization) and includes approximately 25 partner organizations. Information on the structure of CAM can be found in Appendix B. Detailed information on CAM; its members and projects; and agendas, notes, and materials from its meetings can be found on the CAM website: http://www.environmental-initiative.org/our-work/clean-air/clean-air-minnesota.

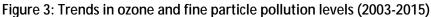
The MPCA and our partners in the private, public, and governmental sectors have many non-point air pollution and voluntary emissions reductions programs across the state. The MPCA has chosen to limit the scope of projects tracked for the Advance Program to projects executed through CAM. Projects developed through CAM will be the focus of this report.

Minnesota's air quality trends

Ozone and fine particle pollution levels in Minnesota have been steadily improving since 2003 (see Figure 3 on next page). However, progress in reducing both pollutants has been affected by year-to-year variability in the weather. Between 2009 and 2011, daily fine particle levels increased due to more frequent stagnant weather conditions caused by a southerly shift of the jet stream. In recent years, with a more northerly jet stream, daily fine particle levels have fallen dramatically. Since 2011, there has been little improvement in ozone pollution. This may be due to more frequent

days with temperatures greater than 90°F. Hot temperatures and sunshine are key ingredients in the formation of ozone.





Ozone

Minnesota has 16 regulatory monitors around the state for ozone. As of 2015, all monitors in the state were demonstrating compliance with the most recent and most stringent ozone NAAQS of 70 parts per billion (ppb). On September 28, 2016 the MPCA recommended to EPA that all the counties in the state be designated attainment for the 2015 ozone NAAQS. Preliminary 2016 data indicates continued compliance with the ozone NAAQS at all monitors in Minnesota. Figure 4 shows the most recent monitoring data from all of the ozone monitors across the state.

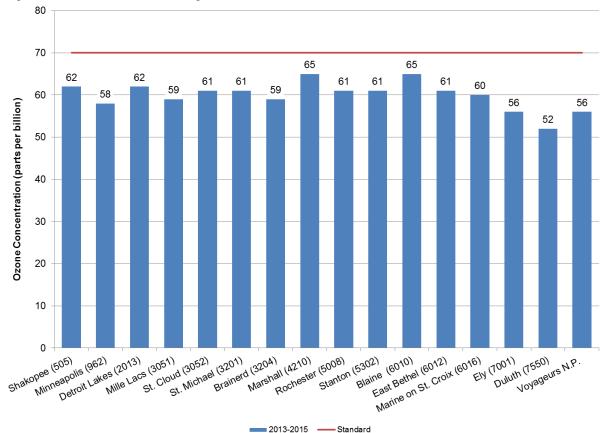


Figure 4: Monitored ozone design values, 2013-2015

Emissions of ozone precursor pollutants – nitrogen oxides (NO_X) and volatile organic compounds (VOCs) – have been decreasing in recent years, indicating that Minnesota will continue to attain the 2015 ozone standard. Figures 5 and 6 show the most recent emissions data for NO_X and VOCs in Minnesota.

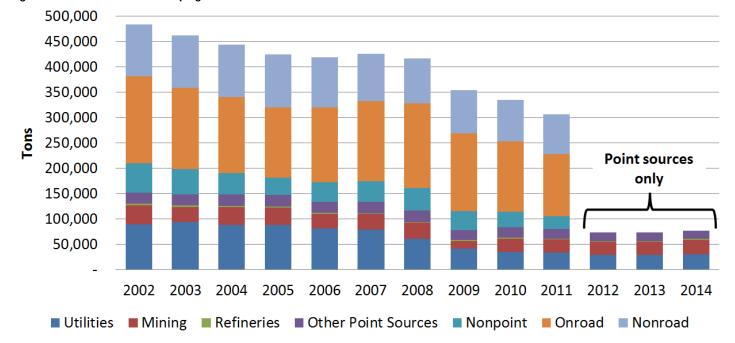
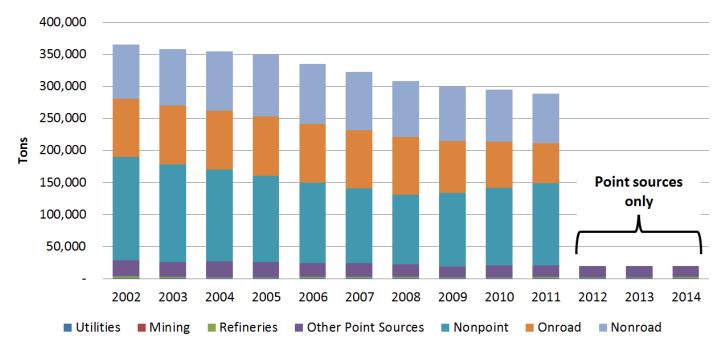


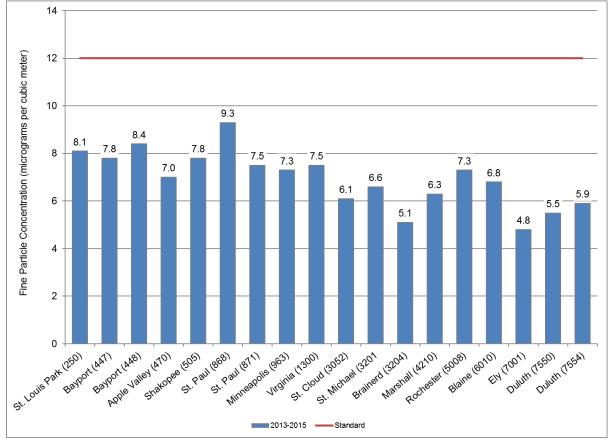
Figure 5: NO_x annual anthropogenic emissions in Minnesota from 2002 to 2014





Particulate matter

Minnesota has 18 regulatory monitors around the state monitoring $PM_{2.5}$. As of 2015, all monitors in the state were demonstrating compliance with both the annual standard (12.0 µg/m³) and the daily standard (35 µg/m³). On January 15, 2015, EPA designated all the counties in Minnesota as attainment for the most recent (2012) NAAQS. Figures 7 and 8 show the most recent monitoring data from all of the $PM_{2.5}$ monitors across the state for both the annual (Figure 7) and the daily (Figure 8) standards.





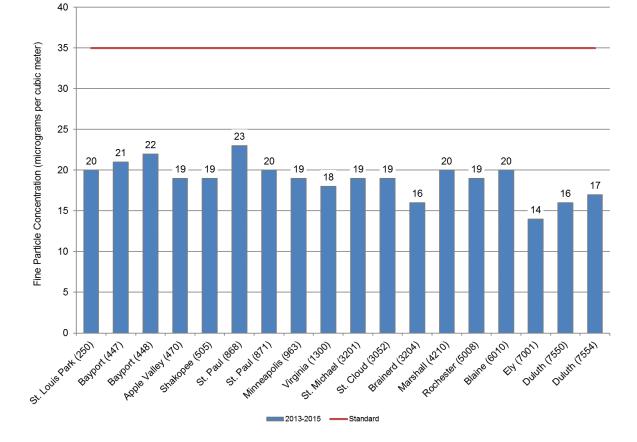


Figure 8: Monitored PM2.5 design values (daily), 2013-2015

In the final implementation rule for the 2012 $PM_{2.5}$ NAAQS, EPA identifies sulfur dioxide (SO₂), NO_X, VOCs, and ammonia as $PM_{2.5}$ precursors. Graphs in Figures 5 and 6 above show the downward trend in Minnesota of emissions of VOCs and NO_X. The following graphs show a downward trend in emissions for SO₂ and directly-emitted $PM_{2.5}$. The figures show emissions from years when the National Emissions Inventory is conducted 2014 data only includes point source emissions, as the 2014 nonpoint inventory is not yet available.

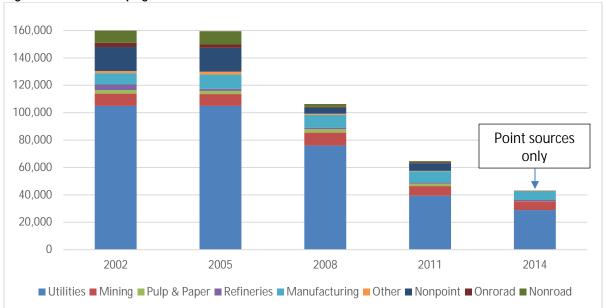


Figure 9: SO₂ anthropogenic emissions in Minnesota from 2002 to 2014

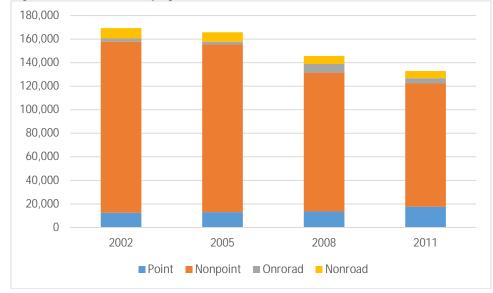


Figure 10: PM_{2.5} anthropogenic emissions in Minnesota 2002 to 2011

Figure 11 breaks out the direct $PM_{2.5}$ emissions from point sources into more specific categories to make it more legible, since point sources are a small contributor to overall direct $PM_{2.5}$ emissions.

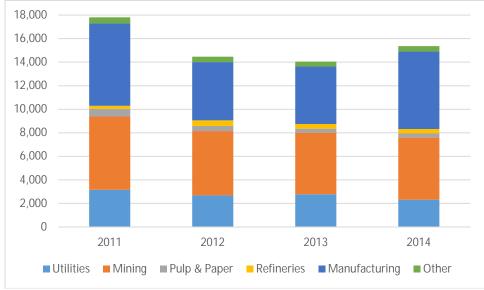


Figure 11: PM2.5 point-source anthropogenic emissions in Minnesota 2011 to 2014

Below are graphs of emissions of ammonia in Minnesota. Data collection methodologies for this pollutant have been changed several times in recent years, so the MPCA does not feel that it can draw any trend conclusions from this data.

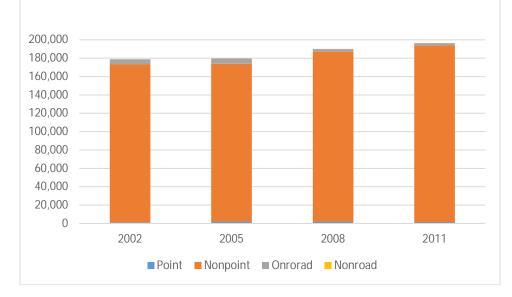


Figure 12: Ammonia anthropogenic emissions in Minnesota from 2002 to 2011

In 2011, the MPCA began collecting annual data on point source emissions of ammonia, which is shown in Figure 13.

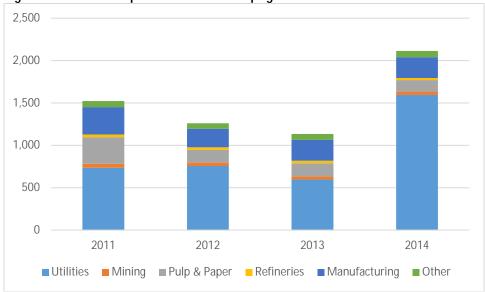


Figure 13: Ammonia point source anthropogenic emissions in Minnesota 2011 to 2014

Advance emission reduction projects

The MPCA and CAM regularly revisit the original 24 Clean Air Dialogue recommendations to prioritize projects. The MPCA and CAM prioritize projects that will achieve significant, measureable emissions reductions, are cost effective, increase public awareness of air pollution and its impacts on human health, and those that will have particular benefit in communities of environmental justice concern. In 2015, to help focus efforts from the larger list of recommendations, the MPCA and CAM concentrated in the following areas for voluntary air emission reductions: mobile sources, area sources, and wood smoke. Appendix A provides a detailed description of CAM emission reduction projects and their implementation status.

Working towards environmental justice

In all areas of our work, the MPCA is working to advance environmental justice in Minnesota. Environmental justice concerns are multiple and complex. Not only do some communities experience higher levels of pollution, but these same communities may not have the same amenities, resources, and conditions to support healthy living.

To address disparities in exposures to air pollution and related health effects, the MPCA is working with a variety of stakeholders and state, local, and national government partners to move toward addressing inequitable policies, systems, and investments. As part of our Clean Air Minnesota initiative, the MPCA and our partners look for ways in which the projects we advance can reduce emissions and improve quality of life in areas where environmental justice is a concern. For instance, the MPCA and our partners have taken steps to target outreach to potential grantees in areas of concern for environmental justice. We still have work to do to improve how we address equity concerns both at the MPCA generally and as part of CAM specifically. These efforts will continue to be a focus of our work in 2017 and beyond.

Advance in 2017

The CAM effort will continue in 2017. In the coming year, we hope to further advance our current, ongoing projects as well as explore new pilot initiatives to try to continue to find innovative ways to reduce non-point emissions around the state. Three upcoming pilot projects that are in their beginning stages at the end of 2016 and planned for 2017 are:

Parts washer partnership

One of the more cost-effective ways that the MPCA and Clean Air Minnesota has found to reduce VOCs is by switching out solvent parts washers with aqueous parts washers. In order to do this in the most cost-effective manner possible, the MPCA has developed a pilot project with a service provider which would give a 25% discount to small businesses when they switch out their solvent parts washers for an aqueous parts washer.

Funding for this project is being granted to provide direct discounted pricing incentives to small businesses, defined as those having 100 employees or fewer in the State of Minnesota, to convert from solvent to water-based (aqueous) parts washers. The funding will only be used for the discounted pricing. Small businesses in areas of environmental justice concern will be given special consideration as candidates for discounted washers with determinations based on MPCA definitions/criteria.

This pilot project is also being undertaken in concert with the City of Minneapolis, who will be partnering with the grantee to further financially incentivize small businesses located in Minneapolis to convert to aqueous parts washers.

High-emitting vehicle repair program

Federal vehicle standards have greatly improved vehicle efficiency and reduced the amount of pollution they produce. However, if pollution control devices on a vehicle break, that vehicle can produce a disproportionate amount of pollution. One recent study from the University of Toronto² found that 25 percent of the worst-polluting passenger vehicles may emit up to 90 percent of vehicle-related air pollution.

Often emission controls on these higher-emitting vehicles are not repaired because their owners cannot afford to make the needed repairs. The vehicles are also, therefore, more frequently driven in low-income neighborhoods. These vehicles are one of many factors that contribute to disproportionate vehicle emissions in communities of low-income and people of color. To help address this inequity, the MPCA is partnering with Environmental Initiative, The Lift Garage, and Cars for Neighbors on a pilot program to bring free emission-control repairs to low-income Minnesotans. The

² J. M. Wang, et al. "Plume-based analysis of vehicle fleet air pollutant emissions and the contribution from high emitters" (http://www.atmosmeas-tech.net/8/3263/2015/amt-8-3263-2015-discussion.html)

project will track emission reductions and cost effectiveness, and if the results are positive, the MPCA hopes to grow the program to repair even more vehicles across the state.

Project Stove Swap

To encourage use of cleaner-burning equipment, Clean Air Minnesota partners Environmental Initiative and Minnesota Power are coordinating with the MPCA on Project Stove Swap, a wood heater change-out initiative that provides financial incentives for residents and businesses with older, dirtier wood-burning equipment to purchase new, cleaner wood-burning equipment that meets the new EPA standards, or gas equipment that is Energy Star certified. Swapping out just one old, outdated wood stove used to heat a home all winter for a new, more efficient model reduces particulate emissions by the same amount as removing over 700 cars from the road. The funding will incentivize the change-out of at least 130 wood-burning appliances, and 20 percent of the funds will be targeted specifically at low-income individuals. For more information, visit <u>http://www.environmental-initiative.org/our-work/clean-air/project-stove-swap</u>.

Conclusions

The MPCA and our CAM partners are committed to continued efforts to reduce emissions around the state. We strive to ensure that the air is healthy for everyone to breathe, including our most vulnerable people. In the coming year we look forward to continued collaboration with our CAM partners and efforts to find new and innovative ways to reduce pollution around the state. We will strive to continuing to tackle the challenges of environmental justice to better address the disparities in air quality, access to decision-makers, and related health outcomes experienced across Minnesota. The MPCA looks forward to working with EPA to achieve these mutual goals through the Advance Programs.

Appendices

Appendix A: Clean Air Minnesota projects Appendix B: Clean Air Minnesota members and meeting information

Appendix A – Clean Air Minnesota projects This table includes information on all the CAM projects worked on in 2016 and planned for 2017.

| Clean Air Minnesota Project Team | Emission reduction project | Implementer (CAM partner) | Description | Equity considerations | Status | Implementation schedule |
|--|--|------------------------------|--|---|--|--|
| Area Source Team | <u>Green Business</u> <u>Cost Share</u> <u>Program</u> | City of Minneapolis | Financial assistance for green business practices focusing on air quality improvements by reducing VOC emissions, particulate matter emissions, or other harmful Hazardous Air Pollutants. | Targeting outreach and funding opportunities in areas of specific exposure concerns. | Ongoing In 2015/16 – Fifteen businesses participated in the program reducing 9.1 tons of VOCs collectively. Projects included an LED curing system at a printing operation, drycleaners switching from perc to alternatives, retrofitting an auto body paint booth to a waterborne system, and updating a manufacturer's paint booth to reduce worker exposure and emissions. | Continuing in 2017 with emphasis on automotive repair, dry cleaners, other businesses seeking innovative green business practices, and energy efficiency projects. |
| | Small Business VOC Reduction Grants | MPCA | A grant program to help purchase equipment to reduce VOC emissions | Targeting outreach and funding opportunities in areas of environmental justice concern. | Ongoing In 2015/16 – Implemented projects awarded in two grant rounds including retrofitting or replacing solvent auto body paint booth systems to waterborne systems, replacing solvent- | Continuing in 2017 by implementing awards from a recent grant round. Continued emphasis on reducing emissions from small businesses and institutions. |

| Clean Air Minnesota Project Team | Emission reduction project | Implementer (CAM partner) | Description | Equity considerations | Status | Implementation schedule |
|--|--|--|--|--|--|--|
| | | | | | based parts washers, and converting a paint line from liquid to powder coating. Developed RFP for next grant round. | |
| | Small Business Parts Washer VOC Reduction Pilot | MPCA and City of Minneapolis | An incentive program with a local supplier to replace small business customers' solvent- based parts washers with an aqueous-based system. | Businesses located in environmental justice areas of concern will be given special consideration. The City of Minneapolis is further incentivizing small businesses located within the city. | Ongoing In 2016 - A grant was awarded to a supplier to develop a pilot project giving a 25% discount to small businesses converting their system. | Continuing in 2017 based on available funding. |
| | Painter training for small and mid- sized businesses | Minnesota Technical Assistance Program (MnTAP) | Provided training and on-site assistance to reduce VOC emissions at coating operations. | | Ongoing In 2015/16 - MnTAP estimates reductions of over 50 tons of VOCs in paint emissions through painter training efficiency gains. 7 Virtual Painter training events (4 auto body, 3 industrial painting) resulted in training 138 spray painters in technique improvements and best practices. 3 Painting webinars with 80 attendees | Continuing in 2017 with emission reduction efforts for automotive refinishing, degreasing and vehicle maintenance, industrial painting, and fiber reinforced plastics. |

| Clean Air Minnesota Project Team | Emission reduction project | Implementer (CAM partner) | Description | Equity considerations | Status | Implementation schedule |
|--|--------------------------------------|------------------------------|---|-----------------------|--|---|
| Mobile Source | Diesel Emission | MPCA | A matching grant | | focused on industrial painting operations. Topics covered by industry speakers were transfer efficiency, paint formulations, and powder coating. | Continuing in 2017 |
| Team | <u>Reduction Act</u> grants | | program to reduce emissions from older diesel engines through retrofits, replacements, or controls. | | In 2015/16 – Twelve projects were awarded to replace older, diesel engines, including a milk delivery truck, a propane delivery truck, a garbage truck, and a Class 7 roll-off truck. Resulting emission reductions were 0.3 tons of $PM_{2.5}$, 6.9 tons of NO_x , and 0.3 tons of VOCs. | with an expected \$400,000 available in funding. |
| | <u>Project Green</u> <u>Fleet</u> | Environmental Initiative | Provide voluntary financial incentives for fleet and equipment owners to invest in pollution control or reduction equipment or to replace older equipment with newer, less-polluting technology. | | Ongoing In 2015/16 - Announced the completion of retrofitting every eligible diesel school bus in Minnesota. Projects included replacing a front-end loader, a bulldozer, a large gen-set, and two tugboat diesel engines to new engines | Continuing in 2017 focusing on older, heavy-duty engines. |

| Clean Air Minnesota Project Team | Emission reduction project | Implementer (CAM partner) | Description | Equity considerations | Status | Implementation schedule |
|--|--|---|---|---|---|-------------------------|
| | | | | | meeting newer federal air quality standards. (Project video) | |
| | High Emitting Vehicle Project | MPCA and Environmental Initiative | Pilot program to repair faulty emission control systems through organizations performing repair service for low-income residents. | Project designed to perform repairs for low-income residents. | Ongoing In 2016 – Grant was awarded to Environmental Initiative to develop a pilot with local organizations. Currently working through implementation details. | Continuing in 2017 |
| Wood Smoke Team | Wood Smoke Awareness Outreach – <u>MN State Fair: Eco</u> <u>Experience</u> | MPCA | As part of the Minnesota State Fair Eco Experience, a display was developed sharing the fine particulate emission impacts from burning wood. | | In 2015/16 - Each year, over 250,000 people attended the Eco Experience. In addition to a wood shed with a moisture meter for people to try, the air quality display included a backyard recreational fire, a non-regulated wood stove, newer wood stoves, and a natural gas unit to compare fine particulate emissions from these combustion sources. | Continuing in 2017 |
| | Learn Before You | American | Developed materials to | | In 2015/16 – Products | Continuing in 2017 to |
| | <u>Burn</u> | Lung | help Minnesotans | | developed included a | raise awareness of |

| Clean Air Minnesota Project Team | Emission reduction project | Implementer (CAM partner) | Description | Equity considerations | Status | Implementation schedule |
|--|-------------------------------|---------------------------------------|--|---|---|--|
| | Project Stove | Association in Minnesota El and | understand the impacts of backyard fires and tips on communicating with neighbors Financial assistance for | 20% of funds will be | website, billboards, factsheets, and a Learn Before You Burn Outreach toolkit for local communities. Initial launch in 2016. | wood smoke impacts along with others on the Clean Air Minnesota Wood Smoke Team. Full roll-out of project |
| | Swap | Minnesota Power | Northeastern Minnesota residents, businesses, and institutions replacing old wood-burning appliances with new, EPA certified units. Implementing program through approved vendors. Incentives based on type of appliance with additional incentives for income-qualified residents. | targeted specifically at low-income households. | | in 2017. |

Appendix B – Clean Air Minnesota members and meeting information

This appendix includes information on CAM members and information on current and future meetings, including the 2015-2017 meeting schedule and agendas and notes from the 2016 meetings. More information, including presentations and detailed project team updates, can be found on the CAM website: <u>http://www.environmental-initiative.org/our-work/clean-air/clean-air-minnesota</u>.



Clean Air Minnesota

Work Group Roster

August 2016 (Alternates listed in italics)

Paul Aasen, Environmental Initiative Board of Directors

Laura Babcock, Minnesota Technical Assistance Program Karl Dewahl, Minnesota Technical Assistance Program

Jessica Burdette, Minnesota Department of Commerce

Mike Cashin, Minnesota Power Melissa Weglarz, Minnesota Power

Karen Clark, Women's Environmental Institute

Lynn Clarkowski, Minnesota Department of Transportation

Shalini Gupta, Center for Earth, Energy and Democracy

Mike Hansel, Barr Engineering

Zack Hansen, Ramsey County

Anne Hunt, City of Saint Paul

Jim Kelly, Minnesota Department of Health Dale Dorschner, Minnesota Department of Health

Tony Kwilas, Minnesota Chamber of Commerce Lloyd Grooms, Minnesota Chamber of Commerce

Charlie Lippert, Mille Lacs Band of Ojibwe

Kelly Marczak, American Lung Association Jon Hunter, American Lung Association

Carl Michaud, Hennepin County Rosemary Lavin, Hennepin County

Chris Nelson, 3M

Peter Raynor, University of Minnesota School of Public Health

Heather Rein, Flint Hills Resources Jake Reint, Flint Hills Resources

Michelle Rosier, Sierra Club

Rick Rosvold, Xcel Energy Patti Leaf, Xcel Energy

Dana Slade, HealthPartners

Mark Filipi, Metropolitan Council Jason Willett, Metropolitan Council

Scott Strand, Minnesota Center for Environmental Advocacy

David Thornton, Minnesota Pollution Control Agency

Jeff Travis, Local Public Health Association

Stephanie Zawistowski, City of Minneapolis Patrick Hanlon, City of Minneapolis

Core Team Members

(The Core Team serves as an advisory group to Environmental Initiative for Clean Air Minnesota)

Paul Aasen, Environmental Initiative Board of Directors

Mike Hansel, Barr Engineering

Anne Hunt, City of Saint Paul

Tony Kwilas, Minnesota Chamber of Commerce

Chris Nelson, 3M

Heather Rein, Flint Hills Resources

Dana Slade, HealthPartners

Scott Strand, Minnesota Center for Environmental Advocacy

David Thornton, Minnesota Pollution Control Agency

Jason Willett, Metropolitan Council

Stephanie Zawistowski, City of Minneapolis



Clean Air Minnesota 2015 – 2017 Schedule

Updated August 31, 2016

<u>4 Core Team meetings; 3 Work Group meetings in FY2016</u>

November 2015

• 11/16/15 Core Team meeting #1 11:00am - 12:30pm

December 2015

• 12/11/15 Work Group meeting #1 10:00am - 12:00pm

February 2016

• 2/8/16 Core Team meeting #2 10:00am - 11:30am

March 2016

- 3/11/16 Work Group meeting #2 1:00pm - 3:00pm
- 3/28/16 Core Team meeting #3 10:00am 11:30am

May 2016

• 5/13/16 Core Team meeting #4 *10:00am - 11:30am*

June 2016

• 6/10/16 Work Group meeting #3 9:00am - 11:30am

<u>7 Core Team meetings; 4 Work Group</u> meetings in FY2017

July 2016

• 7/15/16 Core Team meeting #5 10:00am – 11:30am

September 2016

• 9/9/16 Work Group meeting #4 9:00am - 11:30am • 9/23/16 Core Team meeting #6 10:00am - 11:30am

November 2016

• 11/11/16 Core Team meeting #7 10:00am - 11:30am

December 2016

• 12/9/16 Work Group meeting #5 9:00am - 11:30am

January 2017

• 1/9/17 Core Team meeting #8 10:00am - 11:30am

February 2017

• 2/10/17 Work Group meeting #6 9:00am - 11:30am

March 2017

• 3/10/17 Core Team meeting #9 10:00am - 11:30am

May 2017

- 5/12/17 Work Group meeting #7 9:00am 11:30am
- 5/22/17 Core Team meeting #10 10:00am - 11:30am

June 2017

• 6/9/17 Core Team meeting #11 10:00am - 11:30am



Clean Air Minnesota

Work Group Meeting

Friday, March 11, 2016 1:00 p.m. – 3:00 p.m.

Hiway Federal Credit Union 840 Westminster St. Saint Paul, MN 55130

Agenda

- 1:00 Welcome and opening question Scott Strand, Minnesota Center for Environmental Advocacy Tony Kwilas, Minnesota Chamber of Commerce
 - What is the one story or message you would like to share coming out of Clean Air Minnesota?
 - What is one audience you would like this message directed to?
 - What is the most effective way to publicize this message?
- 1:15 Updates and announcements Scott Strand, Minnesota Center for Environmental Advocacy Tony Kwilas, Minnesota Chamber of Commerce
- 1:35 Communications and Project Funding Teams Bjorn Olson, Environmental Initiative Bill Droessler, Environmental Initiative

2:00 Project Team breakouts

- Area Source Team
- Mobile Source Team
- Wood Smoke Team
- 2:40 Regroup and report
- 2:55 Next steps
- 3:00 Adjourn

Meeting Objectives

- Provide updates/announcements on Project Team current events
- Introduce Communications and Project Funding Teams
- Establish Work Group and Core Team meeting schedule
- Share Project Team announcements and formalize work plans
- Provide feedback and integration of Project Team work plans for the Communications Team



Work Group members present:

Tony Kwilas, Minnesota Chamber of Commerce; Scott Strand, Minnesota Center for Environmental Advocacy; Dana Slade, HealthPartners; Mike Hansel, Barr Engineering; Stephanie Zawistowski, City of Minneapolis; Heather Rein, Flint Hills Resources; David Thornton, Minnesota Pollution Control Agency; Patrick Hanlon, City of Minneapolis; Charlie Lippert, Mille Lacs Band of Ojibwe; Jessica Burdette, Minnesota Department of Commerce; Karl DeWahl, University of Minnesota Technical Assistance Program; Jon Hunter, American Lung Association; Jim Kelly, Minnesota Department of Health; Pete Raynor, University of Minnesota School of Public Health; Sara Smith, Metropolitan Council; Jeff Travis, Local Public Health Association;

Others in attendance:

Mike Nelson, Minnesota Pollution Control Agency; Rebecca Place, Minnesota Pollution Control Agency; Tim Sexton, Minnesota Department of Transportation; Josh Goutermont, Minnesota Power; Susanne Spitzer, Minnesota Pollution Control Agency; Kristin Heutmaker, Northern Tier Energy; Lisa Herschberger, Minnesota Pollution Control Agency; Eric David, Minnesota Pollution Control Agency; Nick Martin, Xcel Energy; Chris Tureson, Central Boiler Inc.; Mark Sulzbach, Minnesota Pollution Control Agency; Dorian Kvale, Minnesota Pollution Control Agency; Ralph Pribble, Minnesota Pollution Control Agency; Kristie Ellickson, Minnesota Pollution Control Agency; Mike Hoyhtya, Hennepin County

Environmental Initiative staff:

Mike Harley, Bill Droessler, Mikey Weitekamp, Bjorn Olson

MEETING SUMMARY

Welcome and Opening Question

Tony Kwilas and Scott Strand began the meeting with Work Group introductions. Scott emphasized the communications campaign and increasing general awareness of Minnesota's air quality issues to the public.

Group discussion of messaging breakout questions:

- What is the one story or message you would like to share coming out of Clean Air Minnesota?
- What is one audience to which you would like this message to be directed?
- What is the most effective way to publicize this message?

Dana Slade mentioned the appeal of Mikey Weitekamp's "Life and Breath" blog post. Jeff Travis agreed that people take notice when air quality impacts their health, such as asthma triggers on bad air days.

Eric David, Mike Hansel, and Patrick Hanlon noted that businesses are driven by saving money, the economic impact, worker exposure, and potential job loss from non-attainment.

Bjorn Olson gave overview on feedback from the December Work Group meeting. Participants generally liked the small group arrangements and breakouts. More emphasis on actionable items and communications was preferred. Participants are encouraged to give feedback on the meeting today and on the meeting follow-up survey to continue to inform meetings.



Scott Strand addressed the composition of the Work Group and if any additional organizations need to be represented. Participants suggested an education presence (high school, elementary), overburdened communities, large industry, business associations, and the health care community

Updates and announcements

Eric David gave Area Source Team updates:

- VOC-reduction resources are available through the Small Business Environmental Assistance Program and the Minneapolis Green Business Cost-Share program. The State deadline is May 11th; the City's deadline is April 22nd. The University of Minnesota Technical Assistance Program (MnTAP) can provide ideas and evaluate reductions for interested businesses.
- The State and Minneapolis are working on a program to replace parts washers with aqueous alternatives. Parts washers are cost-effective reductions. The program is looking at funding with a major supplier.
- MnTAP completed a degreasing project in February and held a webinar on pollutionreduction success stories (available on MnTAP's website). They are working on an E3 paint project, continuing E3 fiberglass project, and looking for stories on toxic waste reduction.

Tony Kwilas asked how the partners are getting business outreach contacts. Lists of hazardous waste and permitted sources have been used as well as help from Environmental Initiative on outreach. The partners are also meeting with associations and equipment suppliers.

Scott Strand asked what the Team is doing to build the case for more funding. The Team's efforts are now on a coordinated timelines and focusing on project cost-effectiveness. By showing the potential and demand for projects, the Team is building a case to scale-up these programs and funding.

The City of Minneapolis will be awarding last year's cost-share projects this April. Smyth Printing, Central Avenue Auto Body, and Unison will be recognized for their pollution reduction efforts. CAM members are encouraged to attend. Minneapolis has increased funding for projects this year and expanded pilots into small business energy efficiency and benchmarking energy use of large buildings (50,000+ sq ft). TreeTrust and Wetland Habitat Restoration were awarded contracts for the Urban Forestry and will begin planting this spring. Interested business should be referred to Patrick Hanlon. A new video highlights the City's program and is available online.

Mark Sulzbach gave a Mobile Source Team update:

- The Minnesota Pollution Control Agency (MPCA) Diesel Emission Reduction Act (DERA) grants awarded \$270,000 for eight on-road projects. The Agency is still looking to find a budget match for next year's federal grant, which is expected to increase.
- The MPCA released a pilot grant to fund high-emitting vehicle program. The agency is also working on outreach to reduce vehicle tampering and is looking into Congestion Mitigation and Air Quality (CMAQ) funding.
- The Team is interested in promotion of SmartWay, which works to reduce idling, fuel use, and increase efficiency and logistics in diesel fleets. Refer interested businesses to Mark Sulzbach.



- Environmental Initiative is looking at partnerships and projects for the EPA DERA grant. The priority is goods movement and large-scale projects.
- Project Green Fleet is scheduling three diesel projects and scouting Duluth-area public fleets.

Tony Kwilas asked if the Team has reached out to the Minnesota Trucking Association. Bill Droessler and Bjorn Olson are meeting with John Hausladen next week.

Tony Kwilas asked what the federal match is for state DERA applications. Mark Sulzbach responded the State provides 50-60% of the costs.

Scott Strand asked if there were any developments regarding state vehicle or product procurement. David Thornton responded that the Team has looked at executive orders and attended IPPAT meetings. The Department of Administration seems committed to adopting cleaner products and integrating cleaner fleet language on public projects. Jessica Burdette suggested contacting the Minnesota Management and Budget Department regarding their process and instructions.

Nick Martin noted that Xcel Energy is looking at replacing bucket trucks with battery alternatives. Xcel is also partnering with Great River Energy and the Great Plains Institute to bulk-buy electric vehicles and provide around 40% discounts.

Mikey Weitekamp gave a Wood Smoke Team update:

- The MPCA has developed two model ordinances (zoning and nuisance) for hydronic heaters. Preparation and planning is beginning for the State Fair eco-experience displays.
- Environmental Initiative is in the beginning stages of rolling out a woodstove changeout program in partnership with Minnesota Power in northern Minnesota.

Jessica Burdette noted that Cook County has a local energy project, possible contacts are George Wilkes and Don Grant. David Thornton also noted that Minnesota Power has three community advisory groups in Grand Rapids, Tofte, and Detroit Lakes that may offer opportunities for partnerships.

Bill Droessler and Dana Slade gave an overview of the Minnesota Sustainable Growth Coalition. The Coalition is a group of Minnesota businesses focusing on actions and opportunities to advance a circular economy that enhances regional growth and competitiveness. The group is membershipbased and has a statewide focus which will imbed air quality issues into project assessments.

Communications and Project Funding Teams

Bjorn Olson gave a Communications Team update:

- Environmental Initiative, MPCA, and the Core Team discussed Clean Air Minnesota communications and concluded a Communications Team was warranted to shape, coordinate, and implement an overarching strategic communications plan for air quality
- Tasks will be to audit existing communications channels; identify goals, audiences, strategies, and tactics; assemble a communications content calendar; and generate ongoing communications content.



- A Team roster is currently being assembled. Any interest or suggestions should be forwarded to Bjorn Olson.
- The overall goal is to provide a comprehensive and cohesive messaging campaign culminating in support for a legislative proposal.
- Environmental Initiative has a contract with Goff Public to help coordinate and implement this campaign.

Sara Smith noted the Metropolitan Council has comprehensive planning and guidance training for local governments that may provide an opportunity to reach out.

Scott Strand encouraged the Work Group to think about communications channels available to regularize and coordinate content.

Bill Droessler and David Thornton gave a Funding Team update:

- Similar to the conversation regarding the Communications Team, a Project Funding Team was needed in order to increase private and public contributions to air quality.
- The Team tasks will be to design and implement a legislative proposal for the 2017 session, increase funding support, contribute to assembling a communications content calendar, and promoting Clean Air Minnesota efforts to potential partners and funders.
- Senior Managers from MPCA regularly review performance. The conclusion on nonpoint air pollution was the 10% emission reduction goal is appropriate, the programs and projects are performing well, and the goal is not being met. Projects have demonstrated legitimacy but there isn't enough money.
- The Team will consist of a small group of people from selected sectors to determine the amount of money needed to move the dial, the ratio of public/private funding, and how the public component should be funded.
- The Team will make recommendations for the Work Group and create a broad coalition of support heading into the legislative session.

Project Team Breakout Sessions

Project Teams reported back to the Work Group.

Project Team will meet to complete workplans by the end of March. Contact Bjorn Olson with if interested in attending or to provide communications content. The next Clean Air Minnesota Work Group meeting will be at the MPCA Board Room on June 10th.

Meeting adjourned



Clean Air Minnesota

Work Group Meeting

Friday, June 10, 2016 9:00 a.m. – 11:30 a.m.

Minnesota Pollution Control Agency, Board Room 520 Lafayette Rd St Paul, MN 55155

Agenda

- 9:00 Welcome and opening question *Tony Kwilas, Minnesota Chamber of Commerce Scott Strand, Minnesota Center for Environmental Advocacy* <u>Opening Question:</u> What is one specific action that you or your organization could take in the next two months to contribute to Clean Air Minnesota's goals? For example:
 - \circ Funding
 - Communications
 - Outreach/Networking
 - Attending a Project Team Meeting
- 9:15 MPCA Non-Point Air Source Prioritization Tool Overview Kristie Ellickson, Minnesota Pollution Control Agency Cassie McMahon, Minnesota Pollution Control Agency
- 10:05 Break
- 10:15 Project Funding Team Update & Discussion Bill Droessler, Environmental Initiative Tony Kwilas, Minnesota Chamber of Commerce Scott Strand, Minnesota Center for Environmental Advocacy
- 10:35 Communications Team Update & Discussion Bjorn Olson, Environmental Initiative
- 10:55 Project Team Updates Project Team Leaders & Members
- 11:20 Next steps *Tony Kwilas, Minnesota Chamber of Commerce Scott Strand, Minnesota Center for Environmental Advocacy*

11:30 Adjourn



Meeting Objectives

- Introduce and overview MPCA's new Non-Point Air Source Prioritization Tool
- Update Work Group on Project Funding Team process and goals
- Review and gather feedback on draft CAM communications plan
- Share Project Team progress updates (Mobile Source, Area Source, Wood Smoke)

Work Group members present:

Laura Babcock, Minnesota Technical Assistance Program; Karl DeWahl, Minnesota Technical Assistance Program; Patrick Hanlon, City of Minneapolis; Tony Kwilas, Minnesota Chamber of Commerce; Rosemary Lavin, Hennepin County; Chris Nelson, 3M; Pete Raynor, University of Minnesota School of Public Health; Heather Rein, Flint Hills Resources; Rick Rosvold, Xcel Energy; Scott Strand, Minnesota Center for Environmental Advocacy; David Thornton, Minnesota Pollution Control Agency; Jason Willett, Metropolitan Council

Others in attendance:

Eric David, Minnesota Pollution Control Agency; Kristie Ellickson, Minnesota Pollution Control Agency; Mary Jean Fenske, Minnesota Pollution Control Agency; Lisa Herschberger, Minnesota Pollution Control Agency; Kristin Heutmaker, Northern Tier Energy; Joe Holland, Hearth, Patio, and Barbecue Association; Cassie McMahon, Minnesota Pollution Control Agency; Bob Moffitt, American Lung Association in Minnesota; Mike Nelson, Minnesota Pollution Control Agency; Rick Patraw, Minnesota Pollution Control Agency; Rebecca Place, Minnesota Pollution Control Agency; Suzanne Spitzer, Minnesota Pollution Control Agency; Mark Sulzbach, Minnesota Pollution Control Agency; Brian Timerson, Minnesota Pollution Control Agency

Environmental Initiative staff:

Bill Droessler, Ellen Gibson, Erin Niehoff, Bjorn Olson, Mikey Weitekamp

MEETING SUMMARY

Welcome and Opening Question

Tony Kwilas and Scott Strand began the meeting with Work Group introductions. Scott then asked the group to answer the following question: What is one specific action that you or your organization could take in the next two months to contribute to Clean Air Minnesota's (CAM) goals? For example, Tony sends out air quality emails to the communications team at the Chamber to let the Chamber membership know about air quality concerns. Bob Moffitt said that the American Lung Association in Minnesota is writing an op-ed on air quality problems during the summer and its affect on human health to the Star Tribune. David Thornton mentioned that he is coordinating efforts with other state agencies to increase the number of electric vehicles in the state fleet and also working on a budget to help with funding air quality improvements. Jason Willett said Met Council is working to add some demonstration electric buses to MetroTranist. Suzanne Spitzer sends out information on her neighbors' page in St. Paul on air quality. Chris



Nelson said that 3M is talking about introducing solvent-reducing materials and processes from out-of-state plants to Minnesota locations. Others around the room wrote down their ideas on notecards at their tables.

MPCA Non-Point Air Source Prioritization Tool Overview

Kristie Ellickson and Cassie McMahon gave an overview of the Non-Point Air Source Prioritization Tool. It focuses in on air toxics risk, including ozone and PM_{2.5}.

Kristie covered the data sources involved in the tool. The tool brings together three different data sources including MNRiskS, ozone forming potential, and the emission inventory from the State of Minnesota. The emissions inventory looks at annual pollutant emissions (pounds/year) and is limited to nonpoint sources and is aggregated at the county level. MNRiskS modeling addresses the health implications of air quality and is based on 2011 emissions inventory. Information is available on a source basis and at the county level. Ozone forming potential is based on the summer-time emissions inventory and, looking at sources and pollutants, ranks the chemical reactivity potential to create ozone. As a note, all of these sources have some limitations. Kristie mentioned that they would like to have a technical workshop here at MCPA or a webinar to show work teams how to use this tool.

Cassie demonstrated the Prioritization Tool, which sorts air toxics by various non-point source source categories (i.e. nonroad diesel, recreational engines, etc.), the pollutant risk drivers (separated by cancer risk and noncancer hazard index), and the annual emissions by county. It gives the user the capability of turning off PM2.5 Diesel to better view the other pollutant risks. Gas station emissions were used as an example to show the pollutant risk drivers and estimated annual emissions of gas stations. Sources of individual pollutants within the category could also be identified, for instance, high emissions of naphthalene from Stage II recovery sources. Bubble charts and bar charts are visuals to display annual emissions. Cassie also demonstrated wood burning and mobile sources as emission examples and how to use various data filters. This tool is currently just for the seven-county metro area.

This tool displays data on a county level, nothing smaller, because of some of the limits of nonpoint source data. Mary Jean Fenske stated that the tool does not look at fine particles; Kristie mentioned that there are ways to try to integrate that data into the tool some day. For now, the tool looks at pollutants that affect human health and clarifies which VOCs to target to reduce ozone. If pollutant risk drivers are colored, the pollutant has a higher potential to create ozone and human health concerns. The tool will be released as soon as some technical errors are fixed. The group also discussed what the tool might look like with the new 2014 MNRiskS data. Lisa Herschberger mentioned that wood-burning emissions would probably be higher using 2014 data. Chris Nelson stated that this tool could be used to compare the pollutant concerns from the metro-area to southern California to look at which pollutants to target and ways to make reductions in those areas.

Bill Droessler would like to set up a workshop or webinar time with Kristie and Cassie to explain the tool more in depth with CAM members.



Project Funding Team Update & Discussion

Bill, Tony, and Scott gave a Project Funding Team update. The biggest objective of the team is to increase the funding for various CAM projects. They have identified proven ideas that may be successful here in Minnesota, and are thinking about specific dollar amounts for the funding asks. The team's main concern is having the capacity to complete the projects if the funding comes through. The team is looking at several funding level scenarios and associated outcomes. The team is also working on determining the relationship and impact of funding on CAM's 10% reduction goals. Tony said that they are working on obtaining Foundation and State money to access Federal funds. Bill asked for people to contact him with ideas of other people and groups to connect to these efforts.

The Project Funding Team is also coordinating with the Communications Team and Goff Public to come up with a funding and communications plan going forward. These plans will be shared with the Work Group soon. Scott discussed fitting public health and environmental justice language into CAM communications to leverage Foundation funding. Bill related this to some of the initial funds for Project Green Fleet coming from a foundation to retrofit Head Start school buses.

Bill brought up that Environmental Initiative was approached about the possibility of having a policy forum on air quality, health, and disparities for the fall of 2016. Environmental Initiative is currently evaluating this possibility.

Communications Team Update & Discussion

Bjorn Olson gave the Communications Team update. The main goal of the group is to shape, coordinate, and implement an overarching strategic communications campaign for air quality to make air quality a "thing." Goff Public has given Environmental Initiative a CAM strategic communications plan that will be shared soon. A communications calendar will be shared in an effort to also better connect with the key communications contacts of various CAM partners. Mikey Weitekamp discussed coordinating efforts and sharing content across partners.

The main campaign goals include: raising awareness and a sense of priority and urgency around air quality in Minnesota; demonstrate an undeniable need for continued public and private investment in emission reduction efforts; and utilize existing and new partnerships to expand the campaign's reach. Key audiences and tailored messaging will be essential for a successful campaign across sectors and the state (see presentation). Main tactics include using media relations, social media, events and presentations, meetings, online tools like blog posts and emails, and collateral materials such as handouts and infographics. David Thornton suggested using Transportation Management Organizations (TMOs) to get messaging out.

Next Steps include:

- Review campaign communications plan
- Review draft content calendar
- Identify opportunities for work group member and other partner participation
- Discuss how to integrate and enhance Be Air Aware website and content



The next Communications Team meeting is June 29th at MPCA. Bjorn asked the Work Group to pass the word along to attract additional people to the team. Scott suggested trying to recruit some private sector members for this team. Mikey said that this does not have to be Work Group specific; getting communications staff from these different organizations to be part of this team would be great. Heather Rein suggested trying to get public schools on the Be Air Aware communications. Rebecca Place said that Be Air Aware has thought about doing an air quality flag program with schools, but it is a secondary goal to the current communication plans.

General Project Team Updates

Mikey Weitekamp gave a general update on project teams:

Each project team now has a set work plan, goal, and metrics. Leading into the next set of project team meetings, Mikey will be working on a methodology on how to calculate various metrics to provide more consistency. This will help better tell CAM's story with more consistent metrics.

Mark Sulzbach and Bill Droessler gave a Mobile Source Team update:

Mark handed out a flyer on updates for projects supported by Diesel Emissions Reduction Act funding. Bob Moffitt asked if there are opportunities to cover generators; Bill suggested opportunities that Bob could look into. Mark also mentioned the automotive class that he taught at Dakota Tech to teach young technicians the rules regarding automotive tampering.

Bill discussed a pilot project that will hopefully be starting next month that focuses on retrofitting cars owned by those who are socioeconomically disadvantaged. Bill also talked about a joint effort between MPCA and the Environmental Initiative to possibly apply for funding through the Metropolitan Council's Congestion Mitigation Air Quality (CMAQ) solicitation. Mikey gave an update on the Minnesota Power supported project to retrofit or repower public fleets in Cook, St. Louis, and Itasca counties.

Mikey Weitekamp gave a Wood Smoke Team update:

CAM is doing some change outs to make sure the correct processes are in place before things ramp up in the fall. Mikey also attended the North Central Hearth, Patio, and Barbecue Association conference in May, connecting with more vendors and other possible partners. The Minnesota wood stove change out program will have a new name, which will be announced online in the next month.

Patrick Hanlon, Eric David, Karl DeWahl, and Bjorn Olson gave an Area Source Team update: Patrick Hanlon discussed various projects being done in and by the City of Minneapolis. Smith Foundry and two dry cleaners applied to go through the Green Business Cost-Share Program. An energy efficiency pilot project is happening currently and may expand next year. Minneapolis is starting to look into worker exposure in nail salons through the Healthy Nail Salon initiative. They are also working on outreach for projects for next year. Minneapolis is working on a project to collect air quality data through special badges worn by bicyclists. They are planting more trees on non-residential properties; please pass any non-residential property owners interested in having more trees on their property along to Patrick. Minneapolis is also working with MPCA on the replacement of parts washers.



Eric David said that the MPCA received 17 grant applications for the Small Business Environmental Assistance Program, but do not have sufficient funds to fund all of these great projects. Some of these projects also have environmental justice components.

Karl DeWahl said that MnTAP is wrapping up the degreaser program and they are looking for additional ways to distribute the results. MnTAP is working on two E3 projects with fiberglass and painting companies this summer. They are also working on a new effort that focuses on assisting people working with toluene to reduce HAP emissions.

Bjorn said that there is interest in creating a map of the various projects that are going on as part of CAM that includes some information on each project. Additionally, there is some potential federal funding available for doing more outreach across the metro. The next Area Source Team meeting is July 25th.

Next Steps

- 1. Communications Team Convening
 - Contact Bjorn Olson to be included on the invite
- 2. Attend a Project Team Meeting
 - Mobile Source: Tuesday, July 12
 - Area Source: Wednesday, June 29
 - Wood Smoke: Friday, July 29
- 3. Provide Communications Content
 - Write a guest blog post
 - Share your clean air activities with CAM partners
 - Cross-promote content via social media
- 4. Please provide feedback via the online survey that will be sent after the meeting

Meeting adjourned

The next Work Group Meeting is scheduled for Friday, September 9th from 9:00 am-11:30 am.



Clean Air Minnesota

Work Group Meeting

Friday, September 9, 2016 9:00 a.m. – 11:30 a.m.

American Lung Association 490 Concordia Ave. St Paul, MN 55103

Agenda

- 9:00 Welcome and Opening Question Scott Strand, Minnesota Center for Environmental Advocacy <u>Opening Question</u>: As we plan for 2017 over the coming months, what is one outcome or milestone that you would you like to see from Clean Air Minnesota in the coming year?
- 9:20 Project Team Updates Project Team Leads/Members
- 9:45 Emerging Project Updates Mikey Weitekamp, Environmental Initiative
- 10:05 Break/Networking
- 10:20 CAM Communications Update Emily Franklin, Environmental Initiative
- 10:35 Project Funding Team Update Scott Strand, Minnesota Center for Environmental Advocacy David Thornton, Minnesota Pollution Control Agency Bill Droessler, Environmental Initiative
- 10:45 Volkswagen Settlement Overview David Thornton, Minnesota Pollution Control Agency
- 10:55 Air Policy Forum Overview Bill Droessler, Environmental Initiative
- 11:05 Next Steps and Upcoming Activities Scott Strand, Minnesota Center for Environmental Advocacy Bill Droessler, Environmental Initiative
- 11:30 Adjourn



Meeting Objectives

- Share Project Team progress updates (Mobile Source, Area Source, Wood Smoke)
- Provide overview of Project Stove Swap and the High Emitting Vehicle Pilot Project
- Update work group on Clean Air Minnesota communications campaign
- Update work group on Clean Air Minnesota funding campaign
- Update work group on Volkswagen settlement details and process

Work Group members present:

Laura Babcock, Minnesota Technical Assistance Program; Karl DeWahl, Minnesota Technical Assistance Program; Mike Hansel, Barr Engineering; Jon Hunter, American Lung Association of Minnesota; Jim Kelly, Minnesota Department of Health; Rosemary Lavin, Hennepin County; Michelle Rosier, Sierra Club; Rick Rosvold, Xcel Energy; Dana Slade, HealthPartners; Scott Strand, Minnesota Center for Environmental Advocacy; David Thornton, Minnesota Pollution Control Agency; Jeff Travis, Washington County Public Health & Environment, Local Public Health Association; Jason Willett, Metropolitan Council

Others in attendance:

Eric David, Minnesota Pollution Control Agency; Kristie Ellickson, Minnesota Pollution Control Agency; Greta Gauthier, Minnesota Pollution Control Agency; Mark Hamerlinck, Minnesota Corn Growers Association; Lisa Herschberger, Minnesota Pollution Control Agency; Joe Holland, Hearth, Patio, and Barbecue Association; Jake McAlpine, Minnesota Department of Commerce; Mike Nelson, Minnesota Pollution Control Agency; Kathleen Norlien, Minnesota Department of Health; Rebecca Place, Minnesota Pollution Control Agency; Doug Schultz, Minnesota Department of Health; Amanda Smith, Minnesota Pollution Control Agency; Susanne Spitzer, Minnesota Pollution Control Agency; Chris Tureson, Central Boiler, Inc.

Environmental Initiative staff:

Bill Droessler, Emily Franklin, Mike Harley, Erin Niehoff, Bjorn Olson, Mikey Weitekamp

MEETING SUMMARY

Welcome and Opening Question

Scott Strand began the meeting by showing a diagram of the program theory structure of Clean Air Minnesota (CAM), from the project teams, to the work group, to the core team, to funding and emissions reductions. Bill Droessler asked for introductions. Scott then asked the group to answer the following question: As we start plan for 2017 over the coming months, what is one outcome or milestone that you would you like to see from Clean Air Minnesota in the coming year? Michelle Rosier would like to see more meaningful engagement. Laura Babcock would like to have more stories and narratives to promote the work that is being done. Kristie Ellickson



would like to have the impact of CAM's work represented on a map to show all of the places where we have an impact. Jim Kelly would like the state to have a year for air, like Minnesota currently has a year for water. Others wrote down their responses on notecards at their tables.

General Project Team Updates

Area Source

Eric David, Karl DeWahl, and Bjorn Olson gave an Area Source Team update: Bjorn, in the place of Patrick Hanlon, spoke about the City of Minneapolis' Green Business Cost-Share Program. A foundry that applied for the grant is no longer eligible, so the team is looking for a new applicant. Two drycleaners are in the process of eliminating PERC from their processes, which will leave six drycleaners using PERC in Minneapolis. Patrick Hanlon is hopeful that Minneapolis could be the first city in the country to have eliminated PERC. There was some discussion on funding for the Green Business program next year, and the outlook is positive.

Eric David talked about the MPCA's Small Business Environmental Assistance Program. The grant program was able to give \$160,000 to eight businesses, resulting in about nine tons of reduction. Three or four of the projects took place in environmental justice areas. The Minnesota Pollution Control Agency is also beginning to investigate voluntary opportunities to educate gas stations about Stage 1 Vapor Recovery to reduce VOC's.

Bjorn talked about Environmental Initiative's Area Source Gateway project, bringing the concept of the MPCA grant program and City of Minneapolis grant program to other areas around the metro. Environmental Initiative is meeting with potential partners and projects and building it out over the coming months.

Karl talked about MnTAP's degreasing program in Duluth, starting this fall, as well as the E3 efforts in painting, which are wrapping up this month.

Mobile Source

Mark Sulzbach, Jon Hunter, and Bill Droessler gave a Mobile Source Team update: Mark talked about the diesel emissions projects that received funding through the MPCA; seven of the projects are completed, and the eighth will finish in October. Bill and Mark are thinking about revisiting and updating the State Diesel Emission Reduction Plan. Environmental Initiative has two re-powers that are set to be completed this fall: A large gen-set engine on a rock crusher outside of Duluth, and a re-power focused on dockside port equipment.

Jon discussed the work going on at the American Lung Association. This summer, the City of Rochester used a higher biodiesel blend for their buses, resulting in 120,000 pounds of carbon reductions and 30 pounds of particulate matter reduced. During the summer months, ALA works with fleets to use more biodiesel blends, statewide, reducing130 tons of particulates and 671,000 tons of CO₂. The Minnesota Department of Transportation, MPCA and ALA applied for a grant to make I-94 from Morehead to Michigan a zero-emission corridor, with fast charging stations for electric vehicles. ALA also received a grant to conduct around 60 education and outreach



events over the next few years, on electric vehicles. Saturday is the start of the Drive Electric week.

Wood Smoke

Mikey Weitekamp gave a Wood Smoke Team update:

Mikey discussed the wood stove booth at the State Fair Eco Experience, which provided a great opportunity to demonstrate new wood stove technologies to the general public. Minnesota Department of Health worked with block captains to distribute backyard burning bookmarks during National Night Out. Lisa Herschberger and Anne Jackson from MPCA are working with Mikey to develop a methodology for quantifying emissions from hydronic heaters.

Emerging Project Updates

Mikey Weitekamp gave an update on two new projects that Environmental Initiative is rolling out this fall. One is Project Stove Swap, which is focused on changing out old wood heating appliances to new EPA certified wood or gas appliances in 17 counties in northern Minnesota. Old stoves can emit 40-60 grams of particulate matter per hour whereas new stoves emit only 4.5 grams per hour. This project provides incentives for any non-certified or non-qualified wood burning device, not just stoves. There are incentives available to residential and commercial customers, ranging from \$325 to \$4,000 depending on the device. There are incentives for income qualified participants, ranging from \$3,000 to \$10,000 depending on the device. Mikey presented to the annual training for the Community Action Programs that administer energy assistance to educate them about the program and start a conversation about how to collaborate. The benefits of Project Stove Swap include: saving money, increasing safety, and breathing more easily – inside and outside. Project Stove Swap is currently recruiting vendors and creating partner engagement and will scale up with more promotion through the fall, targeting early January for a public launch event. As the project launches, quantification calculations will be done and success stories will be collected. Current funding comes from Minnesota Power and Flint Hills Resources and the ultimate goal is to bring the program statewide, leveraging other opportunities as they arise. Mikey has not made a connection to the tribes yet, but is planning on doing so. Another suggestion is to connect with volunteer firefighters and public safety officials in Northern Minnesota.

The other emerging project is the High Emitting Vehicle Repair Pilot. This project was created because 25% of cars cause 90% of pollution and it will be able to target emissions on a neighborhood scale. The two, nonprofit pilot partners are Cars for Neighbors, in Blaine, and The Lift, in south Minneapolis. These garages will provide free repairs on targeted emission reduction technologies, including catalytic converters, oxygen sensors, and evap systems. This is a six-month pilot project, used to verify the processes and cost effectiveness of the technology changes, and will hopefully gather some success stories to secure additional project funding. Current funding comes from MPCA and a private source.

Communications Team Update & Discussion

Emily Franklin gave the Communications Team update. Communications efforts have been coordinated through the communications plan put together by Goff Public. The CAM Communications Team will be meeting monthly between now and the end of the year and will



focus on strategic conversations around communications, branding, and visual identity work. The communications team's work will also include conversations around coordinating and combining efforts and potentially combining elements of the Be Air Aware and CAM webpages.

Project Funding Team Update & Discussion

Scott Strand, Bill Droessler, and David Thornton gave a Project Funding Team update. The MPCA is working with CAM partners to create a legislative proposal to be advanced by the agency in the next session. It is currently \$22 million for the biennium, focused on voluntary business assistance (area sources), wood smoke reduction, the High Emitting Vehicle project, and Small Source Assistance. The proposal outlines the total emissions that would be reduced with this level of funding and substantial work has been put into quantifying the impacts of each program. Diesel will not be part of this legislative request due to the Volkswagen Settlement (see below). CAM and the MPCA will need help making the case for the legislative proposal, so the project funding team will likely be asking for groups to provide their support. A document with talking points will be distributed to assist with advocating for the proposal.

Volkswagen Settlement Overview

David Thornton described the Draft Partial Consent Decree for Volkswagen's emissions violations. In the draft consent decree, which totals over \$15 billion, there is \$43.6 million possibly coming to the state of Minnesota focused very specifically on NOx reduction in predefined diesel sectors. The tribes, nationally, have a settlement of about \$50 million as well, which individual tribes will need to apply for. MPCA will be the lead agency for Minnesota. The draft partial consent decree focuses on diesel emission reduction work, specifically NO_x, and somewhat on electric vehicles. CAM partners submitted comments to hopefully increase the scope of activities covered by the settlement to include off-road diesel equipment and a few other sectors. The settlement will not be signed until October and money will likely not start flowing until the end of next summer at the earliest. Funding will be distributed over 3 years and funds must be encumbered in 10 years. The legislature does not control how the funds are used and do not need to accept it. It will go to a state agency directly to be disbursed, with the state agency likely being the MPCA. As this moves forward, the MPCA will likely be engaging internal and external stakeholders to discuss the most effective ways to allocate these resources.

Air Policy Forum Overview

Bill Droessler discussed the upcoming air policy forum. It will be focused on air quality, health, and equity and will tentatively be held the first full week of December. The planning team, meeting next week, is made up of a diverse group of stakeholders. Contact Meleah Houseknecht, with Environmental Initiative, at mhouseknecht@en-in.org.

Next Steps include:

- 1. Attend a Project Team Meeting
 - a. Mobile Source: Tuesday, September 13
 - b. Area Source: Monday, September 26
 - c. Wood Smoke: Friday, September 30

Contact Mikey Weitekamp (<u>mweitekamp@en-in.org</u>) if you'd like to attend a project team meeting.



2. Communications Content Generation

We are always seeking ideas for communicating about Clean Air Minnesota's work. Ideas on how to participate include:

- a. Write a guest blog post
- b. Share your clean air activities with CAM partners
- c. Cross-promote content via social media
- 3. Homework: Bring a colleague to the December Work group meeting
 - a. We are seeking attendance from potential partners/stakeholders interested in learning about or engaging in the work of Clean Air Minnesota. Specifically we would like to add attendees whose organizations and/or perspectives are not represented by current membership/attendance.

Meeting adjourned

The next Work Group Meeting is scheduled for Friday, December 9th from 9:00 am-11:30 am.



Clean Air Minnesota

Work Group Meeting

Friday, December 9th, 2016 9:00 a.m. – 11:30 a.m.

> Wellstone Center 179 Robie St E. St Paul, MN 55107

Agenda

- 9:00 Welcome and Opening Question Leigh Currie, Minnesota Center for Environmental Advocacy Tony Kwilas, Minnesota Chamber of Commerce <u>Opening Question:</u>
 - What are you looking forward to about this winter?
- 9:20 Minneapolis Air Monitoring Study Presentation *Patrick Hanlon, City of Minneapolis*
- 9:35 Project Funding & Messaging Update David Thornton, Minnesota Pollution Control Agency Bill Droessler, Environmental Initiative

9:50 CAM Branding Debut Emily Franklin, Environmental Initiative

10:00 Project Team Updates Please reference update paragraphs sent out in advance

- Area Source Eric David, Patrick Hanlon, Karl DeWahl
- Mobile Source Bill Droessler, Mark Sulzbach
- Wood Smoke Mikey Weitekamp, Lisa Herschberger
- 10:15 Break/Networking
- 10:25 Air Quality & Health Equity Forum Recap Mike Harley, Environmental Initiative
- 10:35 CAM, Air Quality & Health Equity Break-Outs <u>Discussion Questions:</u>
 - What would the work of Clean Air Minnesota look like if it were consistently approached through a health equity lens?



- What are the barriers to approaching Clean Air Minnesota's work in this way?
- How could the Clean Air Minnesota be adapted to reflect the focus on air quality and health equity?

11:25 Next Steps

Leigh Currie, Minnesota Center for Environmental Advocacy Tony Kwilas, Minnesota Chamber of Commerce

• Upcoming Meetings

11:30 Adjourn

Meeting Objectives

- Share Minneapolis Air Monitoring results
- Update on project funding opportunities
- Debut Clean Air Minnesota branding & equip partners with key clean air messaging
- Share Project Team updates
- Reflection on Air Quality & Health Equity Policy Forum

Work Group members present:

Paul Aasen, Minnesota Safety Council (Environmental Initiative Board); Leigh Currie, Minnesota Center for Environmental Advocacy; Karl DeWahl, Minnesota Technical Assistance Program; Patrick Hanlon, City of Minneapolis; Mike Hansel, Barr Engineering; Jon Hunter, American Lung Association of Minnesota; Jim Kelly, Minnesota Department of Health; Tony Kwilas, Minnesota Chamber of Commerce; Chris Nelson, 3M; Pete Raynor, University of Minnesota School of Public Health; Rick Rosvold, Xcel Energy; Dana Slade, HealthPartners; David Thornton, Minnesota Pollution Control Agency; Scott Strand, Environmental Law and Policy Center

Others in attendance:

Ned Brooks, Minnesota Pollution Control Agency; Mitch Coulter, Minnesota Corn Growers Association; Tim Dalsin, North Central Hearth, Patio, and Barbecue Association (Dalsin Manufacturing); Deepa de Alwis, Minnesota Pollution Control Agency; Kristie Ellickson, Minnesota Pollution Control Agency; Bruce Forness, Hennepin County; Grayson Helgason, GenTec; Lisa Herschberger, Minnesota Pollution Control Agency; Kelly Marczak, MEG Corp; Jake McAlpine, Minnesota Department of Commerce; Tim Montgomery, Ziegler Caterpillar; Mike Nelson, Minnesota Pollution Control Agency; Kathleen Norlien, Minnesota Department of Health; Randi Nyholm, Minnesota Power; Rebecca Place, Minnesota Pollution Control Agency; Ralph Pribble, Minnesota Pollution Control Agency; Luke Schlichte, GenTec; Amanda Smith, Minnesota Pollution Control Agency; Sara Smith, Metropolitan Council, Karen Solas, Minnesota Pollution Control Agency; Jen Stokes, CenterPoint Energy; Mark Sulzbach, Minnesota Pollution Control Agency; Brian Timerson, Minnesota Pollution Control Agency; Chris Tureson, Central Boiler, Inc.; Peter Wasko, Minnesota Department of Transportation



Environmental Initiative staff:

Bill Droessler, Emily Franklin, Ellen Gibson, Mike Harley, Erin Niehoff, Bjorn Olson, Mikey Weitekamp

MEETING SUMMARY

Welcome and Opening Question

Leigh Currie and Tony Kwilas introduced themselves to the group and asked the group to introduce themselves by saying what they were looking forward to this winter.

Minneapolis Air Monitoring Study Presentation

Patrick Hanlon gave a presentation on Minneapolis' air quality study which used a neighborhood-scale approach to air monitoring. The results show that, while overall air quality in the city is good, there are areas and certain chemicals of concern. The City also has different prioritization of levels of exposure than Clean Air Minnesota, starting with worker exposure and then addressing issues at local and regional scales. Some of the largest concerns are for workers in businesses that use and/or create hazardous air pollutants. Workers in these businesses are often exposed to levels up to 100 times greater than the surrounding neighborhood. Another issue is the proximity of daycare centers and residences that are co-located near businesses that emit air pollutants. Local exposure was determined using MNRisk and business data. The City used ambient air quality as a measure of regional exposure. Much of the regional risk is from nonpoint sources. The study also looked for risks that were not currently being observed.

The study took two years, with sampling sessions in November, February, May and August from 2013 to 2015. There were 110-130 air samples per collection, collected over a 72-hour period. There were 130 volunteers, including residents and businesses. Results identified five pollutants of concern:

- Tetrachloroethylene (PERC)
 - 100 occurrences above health benchmark
 - Sources include dry cleaners and degreasing parts washers
- Formaldehyde
 - There were 93 occurrences above the health benchmark
 - o Sources include automobile exhaust and household products
- Benzene
 - There were 78 occurrences above the health benchmark
 - Sources include gasoline fumes, automobile exhaust, emissions from factories, and cigarette smoke
- Trichloroethylene (TCE)
 - There were 14 occurrences above the health benchmark
 - One source is an industrial solvent degreaser
- Naphthalene
 - There were 8 occurrences above the health benchmark



• Sources include automobile exhaust, mothballs, and cigarette smoke

The City is working on reducing emissions by limiting idling, reducing waste to reduce waste incineration, reducing energy consumption through efficient appliances, and tree planting. Next steps include: voluntary air sampling around specific businesses; evaluating pollutants; developing land-use regression; continuing to leverage resources for air quality; leading the charge for cleaner air statewide; and shifting resources from sampling to solutions.

Project Funding & Messaging Update

David Thornton started by discussing the Volkswagen partial settlement consent decree. The settlement for NO_x is over \$15 billion nationwide. This money will go toward replacement and reimbursement for Volkswagen vehicle owners, zero emission vehicle investment through Volkswagen, and environmental mitigation through states and Tribes. Funding will be distributed through a trust, and the possible Minnesota allocation is over \$40 million. MPCA is the lead agency for Minnesota, and will focus on diesel emission reduction work. The agreement needs to be finalized and the MPCA will be working on establishing a stakeholder group to inform the development of the State Beneficiary Mitigation Plan.

CAM Branding Debut

Emily Franklin revealed the new Clean Air Minnesota logo to the Work Group. A communications toolkit will be sent to Clean Air Minnesota partners, which will include two-pagers on CAM and funding, some sample slides, and talking points. The Communications Team will be working on developing these materials in early 2017. There are ongoing media relations on different CAM projects, including the study Patrick discussed earlier in the meeting. The Communication Team will continue discussing closer collaboration with the Be Air Aware website.

General Project Team Updates

Area Source

Bjorn Olson and Karl DeWahl gave an Area Source Team update:

Bjorn, in the place of Patrick Hanlon, spoke about the City of Minneapolis' Green Business Cost-Share Program. The Program completed two dry cleaner change-outs and ten energy efficiency projects. The 2017 grant application process is currently ongoing with applications due April 21, 2017. Since the beginning of the Program in 2013, over 19 tons of air pollutants have been reduced.

Bjorn, in the place of Eric David, talked about the MPCA's Small Business Environmental Assistance Program (SBEAP). The grant program was able to give \$160,000 to eight businesses, resulting in about nine tons of reduction. Four of the projects took place in environmental justice areas. The parts washer change-out pilot program is ongoing. Three projects have been approved, two of which are in Greater Minnesota. The program has a budget of \$50,000 and covers 25% of the cost to switch from a solvent to a water-based parts washer. The City of Minneapolis also has complementary funds to cover an additional 20% for businesses within the City. The SBEAP website has been updated to include more information of projects, reductions, and success stories.



Environmental Initiative has officially announced the Clean Air Assistance Project (CAAP) which offers financial incentives for businesses of all sizes, industries, and locations to reduce air emissions. The program is seeking to replicate the City of Minneapolis model throughout the Metro and State as well as leverage additional funds for emission reduction opportunities. The first project is an auto body waterborne paint conversion project in St. Paul with conservative expected VOC reductions of 2,500lbs.

The University of Minnesota Technical Assistance Program (MnTAP) has secured funding to conduct outreach and providing technical assistance for businesses on waste and pollution reduction in the Phillips neighborhood. Informational videos from degreasing projects are available on the MnTAP website. MnTAP staff also conducted outreach to auto body shops in the West Duluth area through an EPA grant to promote and substitute cleaner degreasing products.

Mobile Source

Mark Sulzbach and Bill Droessler gave a Mobile Source Team update:

Environmental Initiative is replacing a front-end loader with Upper River Services to be completed by the end of the year. The High-Emitting Vehicle project contract is finalized and negotiating insurance requirements before launching in 2017.

Seven of eight projects from the Spring Diesel Emission Reduction Act (DERA) grants have been completed. Grant applications for the Fall round totaling \$400,000 are open through 2:30pm on Thursday, December 22nd.

Wood Smoke

Mikey Weitekamp and Lisa Herschberger gave a Wood Smoke Team update:

Mikey discussed Project Stove Swap, which has now approved five total changeouts. Emission reductions are still being calculated for a few of the hydronic changeouts. Mikey is also working with some of the other assistance heating that is available. There have been a few media inquiries and a media conference will be held in January. Both Environmental Initiative and the MPCA attended the Wood Smoke Pollution Reduction Strategies conference in Albany, New York, focused on developing national best practices for residential heating and emission-reduction strategies.

Air Quality & Health Equity Forum Recap

Mike Harley updated the work group on the Air Quality and Health Equity Policy Forum event that took place on December 6, 2016. It was the start of a conversation and there were numerous perspectives. It is important to address these issues, and therefore finding a way to continue the conversation. The engagement must be genuine and ongoing, with targeted resources and efforts. Part of this will involve building relationships, including those relationships that challenge us.

CAM, Air Quality & Health Equity Break-Outs

The group broke into three smaller discussion groups to discuss the following questions:

• What would the work of Clean Air Minnesota look like if it were consistently



approached through a health equity lens?

- What are the barriers to approaching Clean Air Minnesota's work in this way?
- How could the Clean Air Minnesota be adapted to reflect the focus on air quality and health equity?

Next Steps include:

- Attend a Project Team meeting
 - Area Source: Mon., Jan. 23, 2:00pm at Environmental Initiative
 - Mobile Source: Tues. Jan. 10, 9:00am and the MPCA
 - Wood Smoke: Fri. Jan. 27, 10:00am at American Lung

Meeting adjourned

The next Work Group Meeting is scheduled for Friday, February 10, 2017 from 9:00 am-11:30 am