

# Environmental Performance Partnership Agreement

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Minnesota Pollution Control Agency  
U.S. Environmental Protection Agency Region 5

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October 1, 2008 – September 30, 2012  
FFY 2009 – 2012

## SELF – ASSESSMENT FFY2009

10/1/2008 – 9/30/2009 (First year report)



Minnesota Pollution  
Control Agency

April 2010



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## Authorizing Signatures

This PPA is approved on the date of the last signature received.

For the State of Minnesota:

\_\_\_\_\_  
Paul Eger, Commissioner  
Minnesota Pollution Control Agency

\_\_\_\_\_  
Date

For the U.S. Environmental Protection Agency, Region 5:

\_\_\_\_\_  
Susan Hedman, Regional Administrator  
U.S. Environmental Protection Agency, Region 5

\_\_\_\_\_  
Date

## **Purpose and scope of the PPA**

The Minnesota Pollution Control Agency (MPCA) and the United States Environmental Protection Agency (EPA) Region 5 are entering their eighth Environmental Performance Partnership Agreement (PPA) with the approval of this document. This agreement describes the environmental outcomes that both Agencies are striving to achieve and joint program priorities that the State and EPA think need additional management attention. Roles and responsibilities for carrying out the priorities and key strategies are described in detailed supporting information that can be found on MPCA's website <http://www.pca.state.mn.us>, or by contacting the persons listed at the end of each priority write-up. The agreement runs from October 1, 2008, to September 30, 2012.

This agreement is a product of the National Environmental Performance Partnership System (NEPPS), a joint initiative of the EPA and Environmental Council of States (ECOS). The objective of the NEPPS initiative is to strengthen protection of public health and the environment by directing limited resources toward a state's most pressing environmental issues. Performance Partnership Agreements (PPAs) formed under NEPPS is designed to provide states and EPA with flexibility in how they achieve environmental results and enhance accountability in achieving environmental progress. The Performance Partnership Grant (PPG) is the federal grant used to fund many of the PPA activities.

This agreement does not replace or supersede statutes, regulations, delegation agreements, or other agreements entered into previously between MPCA and EPA.

## **PPA / PPG changes with this grant cycle**

The PPA is an extension of MPCA's Strategic Plan and EPA's Regional Plan. For this grant cycle, the MPCA joined effort with EPA's Maximizing Performance Partnership Initiative. As a result, MPCA is separating out its Performance Partnership Agreement (PPA) from the Performance Partnership Grant (PPG) to allow focus on shared priorities and other high level regional discussion items separate from the detailed workplan measures and activities under the PPG.

## **Elements of the PPA**

The PPA is a concise, strategic document focused on common goals, well-defined outcomes, and strategies with program tools and resources targeted at the most important environmental problems. It includes both MPCA and EPA work. In addition to Shared Priorities, the PPA includes a limited set of critical performance measures and commitments for the base environmental programs.

- ◆ The PPA is a summary of the work done under EPA grants as well as some work done under non EPA grants. Supporting documentation is available in separate

documents and references. Much of this information can be found on the MPCA web site referenced in the opening paragraph.

- ◆ The PPA provides strategic direction to the workforce and influences program work plans by promoting environmental innovations that result in more efficient approaches.
- ◆ The PPA is viewed as a “living document” that is flexible and can be changed to reflect MPCA and EPA needs.
- ◆ The PPA directs planning at the MPCA and EPA Division and Program levels, by establishing shared priorities, desired outcomes, and a holistic approach to environmental protection. It will also promote environmental innovations that result in more efficient approaches. To the extent applicable, base programs will use the shared priorities as they develop program work plans to influence the targeting of work.
- ◆ If a program has been performing in a successful manner, and is expected to continue performing in that manner. *Program performance will be identified as either “adequate” or “needs improvement”. “Adequate” program areas are meeting their stated commitments and performing to the mutual satisfaction of both agencies. “Needs improvement” means a program area is, or is at risk of, inadequately functioning, and the deficiency represents a significant vulnerability to the integrity of the environmental protection program in the State. Adequate programs would receive significantly less review and oversight than programs needing improvement.* The level of detail will need to meet the minimum reporting requirements for EPA Headquarters and Congress. It will be Region 5’s responsibility to identify and inform MPCA of the minimum level of detail needed. The evaluation to determine “adequate” and “needs improvement” programs will occur during the joint assessment process held at the end of each year.
- ◆ The PPA and supporting documentation establishes a framework for mutual accountability by clearly defining shared priorities, desired outcomes, and clear roles for EPA and MPCA.
- ◆ The PPA includes a summary of the environmental conditions in Minnesota to be used as a baseline for measuring future success.
- ◆ The PPA establishes joint assessment for the priority work. By “joint assessment” we mean the following:

*An annual discussion between the EPA and MPCA leadership including program Division Directors to highlight and celebrate successful program achievements; to identify areas that need improvement and/or additional resources; to make adjustments in program direction or approaches; and to reflect on lessons learned for the coming year.*

## **Mutual Accountability**

The approach to mutual accountability affects the way that EPA and MPCA interact and is a change from EPA’s traditional approach to oversight. EPA and MPCA will agree on the appropriate level of EPA oversight of State program implementation. One primary

consideration will be those program areas that are deemed to “need improvement.” However, EPA will continue to review and act on new regulations in program areas that impact State authorization or where federal statute or regulation requires EPA review and approval of State actions (e.g., water quality standards).

## **Enforcement and Compliance Assurance**

Compliance and enforcement activities to be accomplished during the term of this PPA are included in the detailed State program plans; however, a summary of the federal and MPCA roles in compliance and enforcement is helpful.

The following tenets serve as the foundation for the EPA-MPCA relationships with respect to Enforcement and Compliance Assistance activities:

- Explore the most effective application of the full spectrum of compliance tools - from compliance assistance through compliance assurance, administrative/civil enforcement to criminal prosecution - to encourage/maintain the compliance of sources of all sizes.
- Use joint up-front planning to coordinate priorities, maximize agency resources, avoid duplication of efforts, eliminate surprises and institutionalize communication.
- Manage for environmental results which support the respective agencies’ environmental goals and objectives.
- MPCA will ensure that compliance and enforcement information is complete, accurate and timely, consistent with EPA policies and the Information Collection Request (ICR).

There is a continuing role for EPA in environmental protection in the State of Minnesota. EPA carries out its responsibilities in the enforcement arena in a variety of ways. The Agency acts as an environmental steward, ensuring that national standards for the protection of human health and environment are implemented, monitored and enforced consistently in all States. EPA can assist MPCA in conducting inspections and conduct joint enforcement actions with the State and its local government partners. EPA can also conduct enforcement actions as discussed below and provide compliance and technical assistance to the State and its regulated entities. Under this PPA, EPA and MPCA retain their authorities and responsibilities to conduct enforcement and compliance assistance, and such enforcement will be accomplished in the spirit of cooperation and trust. Specific compliance and enforcement data needs will be discussed and shared per each agency’s applicable policies and regulations. Specific federal enforcement and compliance assistance responsibilities include but are not limited to the following:

- Work on National Priorities (e.g. multi-media inspections, companies with significant company-wide non-compliance in several states, and OECA (Office of Enforcement and Compliance Assistance) Priorities and Regional Priorities).
- Ensuring a level playing field and National consistency across State boundaries.
- Addressing interstate and international pollution (watersheds, air sheds, or other geographic units).

- Addressing criminal violations
- Conducting enforcement to assure compliance with federal consent decrees, consent agreements, federal interagency agreements, judgments and orders.
- Conducting State Reviews in accordance with the OECA's National State Review Framework.

EPA performed a review of the MPCA's RCRA (Resource Conservation and Recovery Act), NPDES (National Pollutant Discharge Elimination System) and CAA (Clean Air Act) compliance and enforcement programs in 2007 under the State Review Framework, and will do this again in 2010. EPA also performed an on-site file review of MPCA's RCRA enforcement files in 2008 and will do so again in 2009, 2011 and 2012. All file reviews, as well as the review under the State Review Framework; will include a subset of files from any metro county which has entered into a Joint Powers Agreement (JPA) with MPCA.

MPCA has been successful in its requests for inspection flexibility from the RCRA program. MPCA has executed a JPA with Hennepin County in 2008, and both parties intend to maintain this agreement through the PPA time frame. MPCA intends to conclude JPAs with additional metro counties during the PPA time frame. MPCA has executed its Hospital Initiative flexibility plan in 2008, and will continue this initiative to its conclusion in 2009. EPA and MPCA will continue efforts to be flexible when coordinating priorities and maximizing individual agency resources.

EPA will take enforcement actions in Minnesota as necessary and appropriate to ensure implementation of federal programs and as a deterrent to non-compliance, in accordance with the communication and coordination activities outlined above. There may be emergency situations or criminal matters that require EPA to take immediate action (e.g., seeking a temporary restraining order). In those circumstances, EPA will consult with the State as quickly as possible following initiation of the action.

## **Unexpected Requests**

When EPA forwards requests from headquarters, it will be accompanied by a short explanation of what is expected from the states, and the deadline for response. MPCA will respond to requests in a timely manner. Both agencies will provide ample lead time for review, collection and feedback on data and information. In some cases, this may require the two agencies to determine if there are PPG/PPA activities that need to be altered to provide available funding and staff for the new request.

## **Quality Assurance and Quality Management Plans**

The MPCA has a quality system in place as described in the Quality Management Plan (QMP) found on the web at [http://www.pca.state.mn.us/programs/qa\\_p.html](http://www.pca.state.mn.us/programs/qa_p.html).

The system consists of various levels of management oversight on projects and programs, staff training on quality assurance principles, and the use of the quality assurance



coordinators at the agency for document review and technical assistance. Additional parts of the program policies can be found on the QA website noted above. The policies direct staff and individuals working with the MPCA on minimal requirements for field and laboratory quality assurance, documents required on sites, and links to other agencies and federal programs where additional information may be found. The MPCA quality system was audited (July 2004) by EPA Region V verifying that the system is in place, is functioning properly, and is documented in the Quality Management Plan. A revised MPCA QMP was submitted in March 2007 for review and comments by EPA Region 5. Any additional revisions based on EPA's comments will be completed prior to approval of the QMP.

## **Reporting**

The MPCA will continue to report to EPA the necessary information required by Congress and EPA Headquarters to continue state delegated programs. The MPCA will reference its web site and other existing reports as supporting documentation of the PPA and PPG. Both EPA and MPCA will report through the Joint Assessment process.

## **Public involvement**

In addition to the public participation opportunities required by regulation, the MPCA will continue to use citizen and stakeholder surveys and other methods of gathering input to influence environmental decision and direction. The MPCA has a long history of public involvement in decision making and developing environmental programs. In past years, the MPCA has considered input from the public through the use of statewide surveys and focus groups, listening sessions and citizen juries. All of these methods give us information on the public's environmental priorities so that they may be incorporated into the selection of our environmental goals. Citizen input is used to draft guiding documents such as basin plans and TMDL (Total Maximum Daily Loads) studies.

The MPCA will continue to work closely with EPA Region 5 to identify stakeholders for Minnesota's environment, develop general public support for state and federal environmental programs, raise awareness about important environmental issues, and share information about these issues.

### **On-going public involvement projects:**

The 2008 strategic plan for the agency includes the following goal:

*Goal R.3 Minnesotans act on their environmental knowledge to support healthy ecosystems.*

To that end, the following objective was adopted as part of the strategic plan:

*Objective R3a) Minnesotans maintain or increase their general environmental knowledge and environmental behavior scores from the baseline data presented in the 2002 Minnesota Report Card on Environmental Literacy.*

The Report Card is based on a random telephone survey of over 1000 adults throughout the state of Minnesota who were surveyed for their knowledge about, attitudes toward, and behaviors related to the environment in Minnesota. The first survey was done in 2001 and reported in 2002. The second survey was done in 2003 and the results released in 2004. Among the findings of the second Report Card:

- An overwhelming majority (80 percent) of Minnesotans view a candidate's record on the environment as important when voting.
- 82 percent view loss of wetlands and residential runoff from yards as serious.
- 90 percent of Minnesotans want schools to provide environmental education. This is not surprising given the interest of residents in providing quality education to the state's children.
- Minnesotans are acting to protect the environment. Most Minnesotans frequently conserve energy (87 percent); do not use fertilizer on their lawns or use a phosphorus-free fertilizer (62 percent); and conserve water (51 percent).
- There is a connection between increased environmental knowledge, a more positive environmental attitude, and behavior changes to protect the environment. Respondents who received a higher grade in general environmental knowledge were significantly more likely to have a positive attitude toward the environment and to engage in more positive environmental behaviors.

The last finding has the most significant implications for the MPCA and the environmental education specialists within the MPCA and around the state. The Literacy survey was conducted again this past summer and the results of the 2008 Minnesota Report Card on Environmental Literacy will be released in late fall, 2008.

Public participation is seen as an integral part of the Total Maximum Daily Load (TMDL) study and implementation process.

The goal of the Impaired Waters or TMDL Program is to ensure that all Minnesota waters meet water quality standards. For each water body not meeting standards, a TMDL study must be developed. A TMDL study examines all sources of pollution causing a water body to be impaired and suggests specific ways to reduce both point and nonpoint sources of pollution. While point source reductions can typically be accomplished using regulatory mechanisms (permit requirements, etc.), nonpoint sources must still be addressed through voluntary actions by individual citizens and stakeholders.

In many cases, nonpoint sources are causing the impairments in a water body. In these cases, we will have to rely upon average citizens to implement the best management practices deemed most likely to improve water quality. This will require a citizenry that is aware, open and amenable to changing behaviors. The most successful projects are those where citizens have had direct involvement in studying the problem and in creating an implementation plan to improve water quality.

The MPCA has had some success involving stakeholders in various TMDL studies.

However, we have less experience engaging average citizens in the implementation phase of projects. Both can be very time-consuming tasks and difficult to plan and conduct. Staff knowledge and experience in engaging the public is variable. Consequently, Agency staffs are working toward the development of “best practices” for civic engagement in TMDL projects. We recognize the need for more rigor and consistency when planning for public involvement, especially in the implementation phase of the projects. It is likely to take several more years before MPCA has developed a comprehensive approach to civic engagement in TMDL projects. In the meantime, MPCA staff will continue to engage stakeholders and citizens using the best available tools and techniques currently available.

In addition, the MPCA is interested in public perception about the agency and the work we do. Most years the MPCA includes several questions on the statewide Omnibus Survey conducted by the University of Minnesota Center for Survey Research in the late fall. The following questions are asked on a regular basis for the purpose of determining awareness and trends over time:

- Do you have an idea what the Minnesota Pollution Control Agency does? (Yes, No, Maybe)
- (If yes or maybe) How did you find out what they do?
- Overall, how do you think the Minnesota Pollution Control Agency does at protecting the environment? (Excellent, Good, Fair, Poor)
- How do you have this impression of the Minnesota Pollution Control Agency?

The information is used by the MPCA management and communication team to better tailor our messages to more effectively reach our intended audiences.

For more information about MPCA’s Public involvement efforts, go to:

<http://www.pca.state.mn.us>. Search under public participation.

<http://www.seek.state.mn.us/publications/reportcard2002.pdf>

[http://www.seek.state.mn.us/eemn\\_b.cfm](http://www.seek.state.mn.us/eemn_b.cfm)

## **Environmental Conditions in Minnesota**

To put the elements of the 2009 – 2012 PPA in context, it is useful to take a brief look at the past four decades of progress and the current state of our waters, our air and our land. A summary of Minnesota’s current environmental conditions follows:

### **Water**

Minnesota waters today are decidedly cleaner than they were in the 1960s and 1970s. Industrial and municipal discharges have been addressed. Most combined storm and sanitary sewers have been separated, significantly reducing overflows into the Mississippi. Fish, wildlife and boaters have returned to waters once heavily polluted by human and industrial waste.

Despite decades of progress in cleaning up water pollution, hundreds of Minnesota's lakes, rivers and streams are still not healthy enough for people to safely use and enjoy. These impaired waters do not meet water quality standards and pose risks to people and aquatic life. They contain too much sediment, bacteria, mercury, phosphorus and/or other contaminants. Biotic integrity also is impaired by physical alterations and invasive species.

MPCA staff identified 297 additional impairments in the 2008 assessment process for sections 303d and 305b of the Clean Water Act. There are now 349 rivers and streams impaired for one or more pollutants, and 1,028 lakes and wetlands impaired for one or more pollutants, resulting in a total of 2,575 individual impairments in Minnesota waters to date. Due to the vast abundance of waters in the state and limited staff and funding to assess them, only a small portion, approximately 14 percent of the state's river miles and 18 percent of its lakes, has been formally assessed for impairments.

Once all Minnesota waters have been assessed, more than 10,000 impairments will likely have been found, located in every watershed in the state, given the 40 percent impairment rate noted so far for waters assessed here and nationally. The MPCA is on track to intensively monitor all of the state's major watersheds in the next ten years and through the 2008 sampling season 11% of Minnesota watersheds either have been sampled or sampling is underway. Correcting the water quality problems is made more challenging by the diffuse nature of the impairment sources, such as polluted stormwater, agricultural runoff, and atmospheric deposition of contaminants. Furthermore, distant water quality problems, such as hypoxia in the Gulf of Mexico, may be caused in part by nonpoint source pollutants coming from Minnesota and other Midwestern states. These numbers represent huge environmental, economic and quality of life concerns, and underscore the need for stable, effective funding of impaired waters assessment and cleanup by state, local and private partners.

## **Land**

During the 1980s and 90s, Minnesota took decisive and effective steps to clean up industrial and municipal waste dumps and leak sites that contaminated land and ground water. A series of laws and programs were enacted in Minnesota and nationally to appropriate funds, compel cleanup of the most serious sites, and to create incentives and funding sources to encourage voluntary cleanups.

The state Superfund, enacted in 1983, handles contaminated sites that are large and complicated and that may take several years to fully address. Remediation Division has done or overseen full investigation and final cleanup or control of 160 out of 237 listed industrial waste sites, and 21 of 46 Minnesota sites on the federal Superfund list. The remainder of the listed sites is in the cleanup process. Most sites need ongoing monitoring and maintenance for many years or decades.

The MPCA's award-winning Voluntary Investigation and Cleanup (VIC) program has overseen over 3,000 contaminated projects since its inception in 1988. A total of 3,841 liability assurances or other determination through the VIC program have been issued

upon completion of investigation and, if necessary, remedial activities. This has contributed to those properties becoming candidates for sale, refinancing, or redevelopment. More than 566,000 acres of land have been returned to productive use. About 200 new projects are screened and processed each year in this program, which streamlines the investigation and encourages responsible parties to quickly address problem sites without the fear of protracted litigation that slowed earlier cleanup efforts.

Since 1990, the Resource Conservation and Recovery Act (RCRA) remediation program has completed the investigation and remediation of 262 hazardous waste release sites. The sites consist of hazardous waste generators, permitted RCRA facilities, and former facilities that operated under interim status.

For petroleum leaks, the story is similar. The Petrofund and Petroleum Remediation Program, created in 1987, has investigated and closed more than 15,000 of the 16,700 petroleum leak sites on its roster. About 350 new sites are expected to enter this program each year for the foreseeable future. The Petroleum Brownfield Program, a voluntary program similar to VIC has helped streamline assessment and cleanup actions at more than 2,500 sites, leading to the restoration of more than 1,500 acres in each of the past five years. The voluntary approaches result in liability assurance letters from the MPCA, as well as development plan approvals aiding redevelopment.

The Closed Landfill Program (CLP) was created by the legislature in 1994 as an alternative to Superfund. The CLP is responsible for cleanup and long-term care at up to 112 qualified closed state-permitted municipal waste landfills. Cleanup actions have included relocation of wastes, enhancement of site covers to current standards and installation of ground water pump/treat and active gas collection systems. Other response actions have included sampling and monitoring, operation of active remediation systems, general site care, reimbursement of certain past costs and land & property management. The CLP now operates 20 active gas collection systems which have destroyed more than 100 million pounds of methane in the past 4 years alone. A pilot Landfill Gas to Energy project was initiated using Stirling engines in 2007 at the WDE Landfill, a former NPL (National Priorities List) Superfund site. The CLP is currently undergoing a redesign effort to better address implementation of program requirements including development of Land Use Plans (LUPs) for landfills. LUPs are recognized as institutional controls to help the CLP, land owners and local governmental units responsibly manage qualified [landfill] facilities.

### **Ground Water**

Ground water is the source of drinking water for more than 70 percent of Minnesotans and is a major asset to agriculture and industry. Many threats to Minnesota's abundant ground water have been reduced in recent years by strong cleanup programs and preventive waste management practices, including waste reduction and recycling. However, continued residential and commercial growth along the St. Cloud- Twin Cities- Rochester corridor has begun to strain supplies of clean, available ground water in some areas. In addition, increasing withdrawals for irrigation and biofuels production have caused localized ground water shortages and will require careful monitoring in the future.

In recent years, the MPCA has re-established its ambient well monitoring network and is currently seeking additional funding to allow for construction of new wells in vulnerable aquifers to add to the network. The MPCA coordinates water monitoring and data sharing through an interagency agreement with the Minnesota Departments of Agriculture and Health. The three agencies track trends in ambient ground water quality for nitrates, volatile organic compounds (VOCs) chlorides, pesticides and other parameters, focusing on vulnerable aquifers, recharge zones and areas where land use is changing.

A 2007 MPCA report describing the statewide condition of Minnesota's ground water made the following conclusions:

- Ground water quality is generally good and complies with drinking water standards; however, human-caused impacts to ground water quality are apparent in many areas of the state.
- In urban areas, especially in the Twin Cities metropolitan area, Rochester and St. Cloud, elevated concentrations of chloride and nitrate and detectable concentrations of VOCs are common.
- In rural and agricultural areas, nitrate concentrations are frequently elevated or exceed standards; and pesticides and pesticide degradates are commonly detected, though at concentrations that are nearly always less than applicable drinking water standards.
- Areas of impacted ground water correlate well with land uses that are known to cause the observed quality impacts. The prevalence of elevated nitrate concentrations in ground water in regions dominated by agricultural land uses and in unsewered residential areas is particularly noteworthy.

A major challenge now facing ground water managers is the large number of newly recognized environmental contaminants from consumer products, waste disposal, agricultural and urban runoff, residential and industrial wastewater, and long-range atmospheric transport. These "emerging contaminants" are not currently incorporated into routine monitoring programs. Special studies are underway in Minnesota to determine the magnitude and extent of a number of these compounds in the environment, with particular focus on perfluorinated chemicals (PFCs) and endocrine-disrupting compounds (EDCs).

## **Air**

By many measures, Minnesota has good air quality. Even in the Twin Cities Metropolitan area which includes over three million people, the state has historically fully attained all national ambient air quality standards. This is due in part to favorable geography and weather patterns, but credit must also be given to pollution control efforts by government and industry.

However, significant challenges loom. Since 2007, both the ozone and fine particle (PM<sub>2.5</sub>) standards were lowered. Currently, ozone is at 95 percent of the standard and PM<sub>2.5</sub> is at 85 percent of the standard. Fine particles from mobile and combustion sources

add to regional haze and are of concern as research shows serious heart and lung effects on poor air quality days. In addition, the lead standard has been lowered in 2008, and as a result, there is one new non-attainment area in the Twin Cities.

While most air toxics have been decreasing in concentration, a few such as formaldehyde are near or above health benchmarks. In 2007, daily concentrations of ozone or fine particles were high enough to result in air quality alerts for sensitive groups on nine days in the Twin Cities area. Moderate air quality days (178) were equivalent to good air quality days (178) in 2007.

Attainment of national standards is important for both human health and economic health, as non-attainment designation means development restrictions. The combined effect of lower standards, regional air masses drifting into Minnesota from other states and increasing temperatures may trigger future air quality violations of the standards, and compel more air quality alerts. A broad-based coalition of stakeholders from government, environmental groups and industry--Clean Air Minnesota--is working on voluntary measures to reduce pollutants and prevent non-attainment. Federal clean fuel requirements and other government and industry measures will help, but the outcome is uncertain.

In addition, emissions of carbon dioxide continue to increase in Minnesota, primarily from the burning of fossil fuels. The increased levels of carbon dioxide and other global warming gases are linked to climate change. In Minnesota, observed changes include higher temperatures, shorter winter lake ice cover, higher summer dew points, northward species migration, and more frequent heavy rain falls and floods.

## **Outlook**

Minnesota, in partnership with EPA and other stakeholders, can be proud of its environmental record, but must be ready for continuing challenges, as noted above. Cross-boundary problems such as persistent toxins, climate change, and hypoxia in the Gulf of Mexico as well as multi-media issues like mercury, will require good science, increased partnerships, and innovation to assure a healthy environment for current and future generations.

## **NPDES Permitting**

Accurate and enforceable NPDES permits are an essential part of our environmental protection efforts. Both agencies recognize that there are general areas within the NPDES program that will receive our attention within the course of this PPA. These include the issuance of priority permits, maintenance of permit backlog goals, and accomplishments identified in the Performance for Environmental Results action items.

EPA Region 5 and Minnesota Pollution Control Agency will explore opportunities to continue to expand the use of water quality trading, watershed permitting, and implementation of nutrient controls in NPDES permits. In the next four years we will

focus on these as well as other items outlined or included in more detail in the MPCA FFY 2009 - 2012 Performance Partnership Grant Work Plan, and the MPCA Water Quality Point Source Management Plans, for the next four years including commitments and measurable outcomes.

## **Perfluorochemicals - EPA Acknowledgement**

The MPCA proposes to collaborate with EPA on the investigation, prevention, control, and mitigation of emerging contaminants of concern, focusing on perfluorochemicals (PFCs). The MPCA hopes to improve EPA and MPCA's ability to appropriately respond and take action to reduce human and environmental health risks from PFCs. The MPCA proposed this as a joint priority for FFY2009 at our joint priority meeting on Oct 14, 2008, but EPA thought that perhaps it was premature. However, EPA acknowledges that this is an important area and that EPA will assist the MPCA in whatever way it can to facilitate or be a conduit for MPCA's success in dealing with PFC issues. Emerging contaminants with focus on PFCs will remain a likely joint priority candidate in future years under the PPA.

## **Joint Priorities for FFY 2009 – 2012**

Joint priorities represent a subset of environmental program responsibilities that MPCA and EPA jointly agree to carry out. They represent investment priorities for the PPA period for one or more reasons below:

- The program is an important, newly developing program that requires the attention of the Commissioner and Regional Administrator and senior managers to adequately grow;
- The program area is, or is at risk of, inadequately functioning, and the deficiency represents a significant vulnerability to the integrity of the environmental protection program in the State;
- The program represents a long-term strategic investment opportunity in the State;
- The program offers the opportunity to demonstrate innovations to promote environmental improvement or enable efficiency enhancements.

In the PPA, and supporting documentation, the agencies will describe the basis for the priority and the expected outcome of the effort; the roles each agency will undertake and level of effort; and significant milestones.

The results of our work on each joint priority will be reported during the joint assessment, including, to the extent applicable the impact of any disinvestments made to support the joint priority work.

*The priority write-ups in the PPA are only of summary of the actual priorities. Complete write-ups and detailed information about the priorities is available by contacting the staff persons listed at the end of each priority summary.*



MPCA and EPA have agreed to the following five priority areas:

1. Air Toxics Program Development
2. Impaired Waters – with added element: Major watershed framework for completing multi-parameter/multi-segment TMDLs
3. Water Quality Monitoring
4. Midwest Clean Diesel Initiative
5. Home Land Security

## *Air Toxics Program Development*

**October 1, 2008 – September 30, 2012**

### **Objective:**

MPCA and EPA Region 5 staffs propose to collaborate, develop and implement a program to address sources of air pollutant emissions. This joint priority proposal is directed at improving EPA and MPCA's ability to identify potential areas of concern with respect to air toxic pollutants and seek mitigation as necessary and appropriate to protect the state environment.

EPA Region 5 and MPCA staff will continue to collaborate on the statewide cumulative risk assessment screening tool and in developing a systematic statewide air toxics program.

MPCA Contact: Frank Kohlasch

EPA Region 5 Contact: Jacqueline Nwia

In the upcoming years (2009-2012), we propose to initiate the next phase of this effort and continue the joint priority of previous PPAs in developing a systematic statewide air toxics program. Previous phases focused on the initial development of Minnesota Risk Screening (MnRiskS) tool and EPA staff peer review of the tool. This software tool estimates combined health risks from air emissions of multiple contaminants from multiple sources and through multiple exposure pathways.

MPCA staffs have recently updated the strategic plan for the agency. One of the goals is that outdoor air quality will meet environmental and human health benchmarks for toxic and other air pollutants. The updated objective for this goal is:

The MPCA will target reductions in statewide risk from air toxics by:

- Calculating cancer and non-cancer risks in statewide ambient air using modeling and ambient monitoring by July 1, 2009.
- Identifying the pollutants that largely contribute to cancer and non-cancer risk by July 1, 2009.
- Developing strategies to reduce emissions and concentrations of these risk drivers by July 1, 2010.

MnRiskS will be used to develop our statewide air toxic program and meet these objectives.

We have recently (Summer 2008) accepted the production version of the software after updating & validating the input data (e.g., emissions, toxicity values, chemical and physical parameters important for fate and transport) and completing a series of acceptance tests. MPCA staff currently are familiarizing themselves with all aspects of

MnRiskS and completing a series of validation & comparison tests of the results. We anticipate that a more comprehensive discussion of respective responsibilities for MPCA and EPA Region 5 staff will be constructive in the 2<sup>nd</sup> quarter of 2009.

Current MPCA actions:

1. Completing validation and comparison tests of results:
  - Compare monitoring & modeled values (air concentrations, available fish tissue data).
  - Compare calculated results of past studies with calculated results from MnRiskS.
  - Document findings, strengths and weaknesses.
2. Developing a communication plan

**FFY 2009 Report:**

Updates for future years' actions were agreed to at the July 2009 meeting with EPA Region 5 Air Program. These are:

MPCA actions:

1. Complete first phase of validation & comparison tests and initial results (2002 emissions and ISC):
  - Compare monitoring & modeled values (air concentrations, available fish tissue data).
  - Compare calculated results of past studies with calculated results from MnRiskS.
  - Document findings, strengths and weaknesses.
2. Develop and implement a communication plan
3. Update MnRiskS with processed 2005 emissions and AERMOD
4. Continue extraction, evaluation and validation of database
5. Apply MnRiskS to issue specific questions
6. Develop framework to develop and implement strategies to reduce impact of Pollutants.
  - How and when to engage stakeholders.
  - How to better communicate risk issues.
  - Options for permitting facilities in areas with high background risks.

EPA Region 5 actions (from the previous PPA & from July conversation):

1. Provide accreditation and concurrence regarding validity on the use of MnRiskS.
2. Provide information about Community Action for a Renewed Environment (CARE) program and experiences working with groups in other states, i.e., the Detroit program.
3. Provide information on how other states in the nation address air toxics from all types of sources.
4. Provide assistance as needed.
5. Facilitate discussions with EPA Headquarters, other offices and regions on identified issues.
6. Provide assistance in interpreting MnRiskS results and in scoping statewide air toxics program options.

MPCA staff have completed the first phase of validation and comparison tests of the initial MnRiskS tool - this version used 2002 emissions and the ISC model to disperse pollutants. The results have been summarized in a report that has been accepted for presentation at annual conference of the International Society of Exposure Science. The results of this version have been shared internally and with EPA Reg. 5. The results from MnRiskS are also used (in concert with our monitoring results) to inform our strategic objectives - calculation of cancer and non-cancer risks and identification of pollutants that largely contribute to these risks. Pollutants identified in August 2009 are acrolein, diesel PM, dioxins/furans, PAHs, formaldehyde and PM<sub>2.5</sub>.

We have also initiated processing of 2005 emissions for the next version of MnRiskS that will use AERMOD to disperse pollutants.

EPA Region 5 actions (from the previous PPA):

- Provide information on how other states in the nation address air toxics from all types of sources.
- Provide assistance as needed.
- Facilitate discussions with EPA Headquarters, other offices and regions on identified issues.
- Provide assistance in interpreting MnRiskS results and in scoping statewide air toxics program options.

**Additional information:**

For more information on the Air Toxic Joint Priority, contact:

At MPCA, Frank Kohlasch at 651-757-2500 or [frank.kohlasch@state.mn.us](mailto:frank.kohlasch@state.mn.us); or Shelley Burman at 651-757-2255 or [shelley.burman@state.mn.us](mailto:shelley.burman@state.mn.us);

At EPA Region 5, Jacqueline Nwia at 312-886-6081 or [nwia.jacqueline@epa.gov](mailto:nwia.jacqueline@epa.gov).

## *Impaired Waters*

October 1, 2008 – September 30, 2012

### **Statement of Environmental Problem/Issue:**

Based on the Minnesota's 2008 303(d) impaired waters list, there are 2,575 impairments on 1028 lakes and 349 rivers. Minnesota is committed to using the impaired waters approach to restore water bodies to meeting their designated uses, while at the same time maintaining those waters that are meeting designated uses.

The MPCA will continue to work on its impaired waters approach with stakeholders through the Clean Water Council (see program development section below), while working with Region 5 to meet the commitments set out in 303(d) of the Clean Water Act. This revision of the joint priority addresses these mutual efforts over the next four years.

This joint priority is broken into three components: **Program Development, Total Maximum Daily Load Studies (TMDLs), and Implementation.** Assessment and impaired waters listing activities are addressed in the Monitoring and Assessment shared priority section of this report.

**MPCA Strategy: Restore the chemical, physical and biological integrity of Minnesota lakes, streams, and wetlands that do not support designated uses.**

**EPA Strategy: Improve water quality conditions in impaired watersheds and restore impaired waterbodies to achieve designated uses.**

### **Program Development Priorities:**

The MPCA's program development activities are driven in large part by Minnesota's Clean Water Legacy Act (CWLA). Signed into law on June 2, 2006, the purpose of the law is "to provide authority, direction and resources to protect and restore the state's surface waters, as required by section 303(d) of the federal Clean Water Act". (MN statutes, chapter 114D)

The law led to one-time appropriations in each of the past two biennia (\$24.95 million in FY 2007 and \$54 million in FY2008-09) for the following activities:

- Accelerate assessment of Minnesota's waters with a goal of comprehensive assessment of the state every 10 years.
- Develop TMDLs with an emphasis on 3<sup>rd</sup> party projects led by local government and other local agencies.
- Provide grants to implement TMDLs and protection activities through existing state and local programs designed to improve water quality.

MPCA Program Development Priorities for FFY 2009-2012:

**1. Administer Clean Water Council**

The CWLA created a governor-appointed Clean Water Council, a 23-member citizen/state agency advisory group which advises on the administration and implementation of the Clean Water Legacy Act, including making recommendations to the Governor on the appropriation of funds, and to the MPCA on the prioritization of TMDLs and other program/policy development issues. The inaugural meeting of the Council was held in March 2007.

Over the next four years, the MPCA will continue to provide administrative and policy support for the Council and its Work Groups, including meeting planning and follow-up, maintenance of Council's website, report writing and processing, guidance on policy and program budgets, and special projects. The Council has legislative reports due in December 2008 and 2010. These reports will be provided to EPA for information.

**FFY 2009 Report:**

The December 2008 Clean Water Council biennial report was completed on time. It can be found at: <http://search.pca.state.mn.us/query.html?charset=iso-8859-1&style=joomsearch1&col=newsite&qt=December+2008+Clean+Water+Council+biennial+report>.

**2. Develop Statewide Watershed Approach to prioritize and integrate Monitoring and Assessment, TMDL, and Restoration and Protection Activities**

The CWLA called for the Clean Water Council to develop prioritization strategies for restoration and protection activities. Over the next four years, the MPCA will be designing and putting in place a new prioritization strategy, which was endorsed by the Council in 2008. The goal of the strategy is to increase efficiency and predictability through a watershed management system that integrates monitoring and assessment, TMDL, and restoration and protection activities.

Based on organizing activities on the major watershed scale (i.e. primarily 8-digit level Hydrologic unit Code (HUC), with some exceptions), the MPCA is exploring ways to synchronize TMDL development and implementation in major watersheds within 2-3 years follow monitoring and assessment of the same watersheds. The current plan is to complete assessment of all 81 major watersheds over a 10-year period, at a rate of 8 watersheds per year. TMDL studies will begin 2-3 years following completion of assessment. The planning process will ultimately result in a watershed plan that integrates both restoration and protection implementation activities, consistent with EPA's watershed planning (9 element watershed plans) approach.

While the MPCA has completed several years of pilot and now fully standardized monitoring work using this approach, the MPCA is in the early stages of planning the fully integrated approach to our water work, and will be working on pilot projects and other design activities over the next few years. The MPCA will begin to pilot this watershed planning concept in the Buffalo River Watershed and Cannon River Watershed beginning in FFY09 through FFY10. These projects are of great interest to

EPA in terms of transferability to other states and regions. EPA will be included in this process and will work with MPCA to help find ways to help highlight protection efforts.

**FFY 2009 Report:**

The MPCA is making good progress on integrating the watershed approach into its operations. Link to the Watershed Approach Fact Sheet Summary is posted at:

<http://www.pca.state.mn.us/index.php/water/water-types-and-programs/surface-water/basins-and-watersheds/watershed-approach.html>

Design and initial implementation of stressor identification monitoring, watershed modeling, implementation planning, and related activities continues. Pilot projects in the Cannon River and Buffalo River Watersheds are underway. Selection of state fiscal year 2010 and 2011 TMDL projects emphasized full watershed projects, moving more and more away from reach-by-reach TMDLs. Scheduling of the 2010 Impaired Waters list was done by grouping listings into full watershed projects as much as possible. The Buffalo River Watershed Project is a pilot project for the development of a methodology to guide surface water quality management activities based on an 8-digit HUC. The project will encompass a wide range of activities and goals directed at the restoration of impaired waters and the protection of surface waters within the watershed where water quality conditions meet water quality standards. The local project sponsor is the Buffalo Red River Watershed District. End products of the project will include the assessment of all surface waters within the watershed, the implementation of a very extensive local stakeholder involvement/public participation process, the development and implementation of a stressor ID process, the development of a multi-parameter watershed-wide TMDL report, the development of a TMDL implementation and protection plan for appropriate areas throughout the entire watershed, and the linking of all these products into the watershed districts 10-year management plan. Phase 1 of the project was initiated in March of 2009 and runs through October of 2010. It is anticipated that the entire project will take 4 to 5 years to complete. Activities undertaken up to this point in time include: two years of surface water chemistry monitoring at 32 sites within the watershed; flow monitoring at 13 locations for 2 years; biotic monitoring at 13 sites (the MPCA's intensive monitoring program) for 1 year; the development of a civic engagement strategy geared towards maximizing the involvement of the watershed residents in the process; and, GIS activities. Two project kick off meetings were held in early summer to present and discuss the scope of the project with the local citizenry and the members selected for participation on the various local technical and advisory committees. The collection and review of relevant information (water quality data, local plans, and other relevant literature) has begun. Discussions have begun with technical advisory committee members, state agency staff, and the watershed district concerning what type of stressor identification process would be effective and timely given the size and the nature of the watershed.

A comprehensive Cannon Watershed Plan is being developed that will guide and coordinate implementation activities across political boundaries. The first step was completion of the Lower Cannon River turbidity TMDL implementation plan in October 2009 to ensure eligibility for restoration and protection funding. Currently the water planners from the multiple counties in the Cannon River Watershed are working together

to create a unified vision of watershed management to share with stakeholders for comment.

### **3. Design and Implement an Effectiveness Tracking System**

The CWLA's implementation policies required agencies "to establish and report outcome-based performance measures that monitor the progress and effectiveness of protection and restoration". (114D.20, subd. 3(7))

Since December 2007, the MPCA has been working with state, federal and local partners, including EPA, on a process to develop an effectiveness measurement framework. The initial phase of this project concluded in the fall of 2008 and resulted in the design of a framework that will describe progress at different scale and time periods.

The next phase of this project, beginning in October, 2008, will be to develop specific measures, a measurement tracking system, and pilot projects to evaluate the framework. To help implement this phase, the MPCA has volunteered to participate in EPA's pilot program effectiveness effort starting later this fall. The project will provide a consultant to assist the MPCA and its partner agencies and will require three years to complete. Concurrently, the MPCA will participate in a similar effort sponsored by the State of Indiana in early FFY09.

EPA intends to use this process as a model for other pilot states interested in tracking program effectiveness. This effort will involve significant resources from EPA WWB. However, this project will provide a benefit to other Region V states and to EPA, in terms of being able to better report program success and manage monitoring, planning and restoration resources.

#### **FFY 2009 Report:**

MPCA is participating in the EPA effectiveness measures project, and participated in the State of Indiana effort. The MPCA continues to work with the Clean Water Council on development of effectiveness measures. Also, MPCA put out an RFP using "Stimulus" funds for assistance with enhancing Minnesota's ability to measure and communicate the results of TMDL development and watershed planning efforts.

### **4. Develop a Watershed Data Integration System**

To help track and report on effectiveness measures, among many other management needs, the MPCA is developing an information management system for elements of its watershed programs including: assessment and monitoring; administrative and financial; geospatial data and information; and TMDL development and implementation and protection efforts. When fully implemented over the next four years, the system will integrate and enhance existing and new databases, and connect them through an information portal. A business object model was completed for the project in 2007 and the initial design of system requirements will be completed by the end of FFY09. Further design and development will be conducted in FFY09 and FFY10 before the system is fully operational, but some important elements of the system will be completed as early as FFY10, with the full system completed by the end of FFY11. EPA will be looking for



potential transferability of what is accomplished here to other states.

**FFY 2009 Report:**

Business and system requirements were identified, and a report including the requirements and a plan for development of the full system was completed in FFY09. A contracts database selection project is underway in early FFY10 with the Minnesota Management and Budget Office. Two other components of the overall system will begin development in FFY10 - the "GIS" component and the "managing waterbodies" component. Another component, "workload management" has been deferred as a stand-alone project, and may be incorporated into an agency-wide project in the future.

**5. Special Joint Projects with EPA**

In addition to the effectiveness measures project discussed in #3 above, MPCA and EPA are working together on several nationally recognized special projects, supported in part by EPA HQ funding. Projects include the Minnehaha Creek Watershed Stormwater TMDL effort to assess BMP effectiveness, and the Lake Pepin TMDL Implementation Plan Nutrient Reduction Strategy to reduce hypoxia problems in the Gulf of Mexico. Also, the MPCA has participated in EPA's national effort to develop guidance linking stormwater TMDLs and NPDES permits, which is due in early FFY10. The MPCA will continue to need to work with EPA to resolve stormwater policy and permitting issues over the next four years.

**FFY 2009 Report:**

Minnehaha Creek – Lake Hiawatha TMDL and Stormwater BMP Optimization Tool Development: This project is collaboration between MPCA, EPA and the Minnehaha Creek Watershed District. Work in FFY09 focused only on the TMDL development. At this early stage partners are evaluating the available data and characterizing the watershed with respect to land use, hydrology and pollutant sources. The project held a kick-off meeting with stakeholders to present this information and discuss the plans for the project.

Lake Pepin - Tetra-Tech is finalizing the documentation of candidate BMPs to evaluate in the SWAT modeling, having circulated it among Minnesota state agencies for comments. The University of Minnesota has begun to develop SWAT models calibrated to N, P and TSS in the Beauford Ditch and Seven Mile Creek Watershed.

MPCA's construction and draft industrial stormwater permits link TMDLs and TMDL implementation plans to permit requirements. Likewise, MPCA's draft Phase 1 MS4 permits contain language linking impaired waters and TMDLs to permit requirements. MPCA has developed guidance and policy on writing TMDLs that link to stormwater permits.

**6. Other Program Development Activities**

- Training: The latest of 12 modules of an impaired waters training program for internal staff and external customers will be completed and web-posted in FFY09. Other modules will be considered in the years ahead as needed. EPA conducted 2 training sessions on TMDLs for MPCA and stakeholders in FFY08, and will likely be asked to conduct more sessions over the course of the next few years as

MPCA expands its program.

- TMDL Development Protocols: To date, four TMDL development protocols have been completed for the parameters of low dissolved oxygen, bacteria, excess nutrients in lakes, and turbidity. Updates to some of those protocols are scheduled in FFY09. Also in FFY09, a new protocol for impaired biota TMDLs will be completed.
- Master Contract for TMDL Consulting Services: The MPCA utilizes private consultants in completing TMDLs. The MPCA has prequalified consultants and established a Master Contract for use of those firms selected to be in the consulting pool. The 2<sup>nd</sup> 5-year master contract will expire and the 3<sup>rd</sup> Master Contract will be put in place in FFY09.
- Protection Strategy: A Protection Strategy for unimpaired waters has been drafted by an interagency work group and is expected to be endorsed by the Clean Water Council in FFY09. EPA is very interested in this at the Regional and National levels. EPA will engage MPCA to explore ways to give credit for active watershed protection planning and implementation efforts.
- Region 5 TMDL Practitioners Workshop: Minnesota will host the 2009 Workshop and plans on providing speakers on several topics, such as the Lake Pepin TMDL, other TMDL projects, stormwater policy, TMDL implementation, the watershed data integration project, or the effectiveness measures project, as requested.
- On-going policy development - The MPCA and EPA will continue to work together to resolve on-going policy issues that arise in conducting TMDLs, for example the application of concepts like “natural background conditions” and “site specific standards.”

**FFY 2009 Report:**

Impaired waters training program modules for internal staff and external customers were completed and web-posted in FFY09 at:

<http://www.pca.state.mn.us/index.php/water/water-types-and-programs/minnesota-s-impaired-waters-and-tmdls/project-resources/tmdl-training.html>

The bacteria TMDL protocol was updated and the impaired biota TMDL protocol was completed. Both are posted at:

<http://www.pca.state.mn.us/index.php/water/water-types-and-programs/minnesota-s-impaired-waters-and-tmdls/project-resources/tmdl-policy-and-guidance.html>

We also began development of a protocol to guide TMDL implementation planning, and completion is targeted in FFY 2010.

The TMDL Master Contract has been extended until 1/29/10. The 3rd TMDL Master Contract is scheduled to take effect in February 2010.

The final draft of the protection strategy working document has been developed by the Clean Water Council's Prevention and Monitoring Work Group, but the document has not yet been discussed by the full Council. This discussion is anticipated to occur in FFY10. MPCA hosted the Region V TMDL practitioners' workshop in Red Wing, MN in 2009. MPCA gave a variety of presentations. The workshop was well attended and received. MPCA and EPA had several policy discussions in FFY09, including site specific standards and allocation strategies for the Lake Pepin TMDL, reasonable assurance,

interstate and tribal issues.

**TMDL Priorities:**

As of October, 2008, the MPCA has received EPA approval of 1,103 TMDLs – 105 for waters impaired by conventional pollutants and 998 for mercury-impaired waters. The MPCA exceeded its PPA commitment of 100 TMDLs in FFY 08, submitting 516 TMDLs to EPA for approval. This included 501 TMDLs for mercury and 15 for conventional pollutants.

**MPCA TMDL Priorities for FFY 2009-2012:**

The 2007 legislative session saw an appropriation of an additional \$18 million for the FY08-09 biennium to the MPCA to develop Total Maximum Daily Load Studies (TMDLs). This funding, along with funding from the 2006 legislative session, has been a big boost to reducing MPCA's TMDL backlog and enabled the agency to hire staff critical for technical and administrative support. As a result, by the end of 2008, TMDL projects addressing nearly 50 percent of listings for conventional impairments are now underway.

To continue this progress, the Clean Water Council is advising the Governor and the Legislature to continue TMDL appropriations at the \$18 million level for FY2010-2011 (7/1/09-6/30/11). The MPCA believes that this funding will enable it to complete most of the projects it has underway and meet its annual commitment to EPA over the next four years.

The number of specific conventional parameter TMDLs that MPCA is to submit to EPA in FFY09 is 60, and subsequent annual goal numbers will be provided under separate cover to EPA by November 1<sup>st</sup> of each year for review and approval, and are incorporated into this document by reference. The MPCA is working with EPA on an approach to PCB impairments, which will involve either a re-categorization of PCB impairments to CALM 4b on the 2010 impaired waters list, or submittal of a PCB TMDL in FFY09.

**FFY 2009 Report:**

The MPCA received a legislative appropriation for FY10 and FY11 of \$18 million as requested.

The MPCA received approval from EPA for 11 TMDL projects addressing 61 listings, meeting the goal of addressing 60 listings in FFY09.

For FFY10, the PCA again proposes a goal of 60 listings addressed. The PCA intends to add over 30 listings to the mercury TMDL on the 2010 list. As of October 2009, the PCA had 7 projects on public notice addressing 16 listings, and had 7 projects addressing another 21 listings at EPA for preliminary review.

PCA submitted a draft PCB TMDL, but then followed with a 4B designation request. EPA indicated to PCA that the 4B request did not provide enough information but did not specify what was missing. PCA is following up with EPA to see what would need to be done to the 4B request to make it acceptable, and then will decide either to go forward with it, or revert to a TMDL.

**Other TMDL Priorities:**

- **Lake Pepin TMDL:** The Lake Pepin TMDL project is nearing completion and it will be placed on public notice in FFY09. The MPCA will continue to brief EPA Region 5 staff on the project's progress. As noted above in the program development section, we will also be working closely with EPA on a nutrient reduction strategy utilizing implementation activities for the Lake Pepin TMDL. Close coordination is needed on NPDES issues, including items such as stormwater allocations and timing of wastewater permit revisions. The agency is finalizing documents for public notice of two site-specific standards: for Total Suspended Solids/Submersed Aquatic Vegetation in the Mississippi River from the Minnesota River confluence through Lake Pepin; and eutrophication of Lake Pepin. We are conducting an additional run of the Upper Mississippi River-Lake Pepin model, using output from Scenario 4 of the HSPF model for the Minnesota River basin to Jordan, linked to CEQUAL2 model for Metro Minnesota River transport to the Mississippi River. Results, expected any time now, will tell us what would happen if we should meet the TSS standard for the Mississippi but allowed TP discharges from metro area point sources to expand to permitted capacity. We expect to begin public notice of the site-specific standards in December 2009 or January 2010 for 45 days, respond to comments, in Feb-March 2010, go to MPCA Board in April or May 2011, and send the final documents to EPA in May or June 2010. Upon EPA approval, we would then public notice the TMDLs in August or September 2010.
- **Watershed DELTA:** The MPCA will be implementing a new database called "Watershed DELTA". This will be one of the components of the watershed data integration system (mentioned above) but will be operational in FFY09. It will track TMDL financial and project information, as well as similar information for other watershed programs, and should also be very helpful for our reporting needs.

**FFY 2009 Report:**

The Lake Pepin TMDL will go on public notice in 2010.  
Watershed DELTA became operational in FFY09.

**Implementation Priorities:**

Through Clean Water Legacy Act appropriations, a total of over \$30 million in nonpoint source restoration and protection funds has been allocated to other state agencies since 2007. In addition the MPCA has committed a total of \$4 million of its CWA section 319 funds for TMDL implementation, including \$1 million in FFY07 and FFY08, and \$2 million in FFY09.

This funding is available to local government agencies in watersheds with both an approved TMDL and implementation plan, so there is a strong incentive to get both of these plans done as quickly as possible. However, demand continues to outpace available funding. To help reduce this gap, the Clean Water Council is recommending a near tripling of funding for the FY2010-2011 biennium for nonpoint source restoration and protection funding.

**FFY 2009 Report:**

MPCA is granting over \$3.4 million in FFY10 Section 319 funds.

The state Board of Water and Soil Resources is allocating over \$13M for implementation projects in FFY10. Projects with completed TMDL implementation plans or identified in local water plans will receive high scores in prioritization of applications for over \$8 million of the funds.

**MPCA Implementation Priorities for FFY 2009-2012:**

- **Implementation Plan development:** The MPCA will continue to work with local government to develop implementation plans within one year of EPA approval of the TMDL. For most TMDLs, however, implementation plans are being developed concurrently with the TMDL in order to expeditiously apply for state funding through the Clean Water Legacy Act. Guidance for implementation plan development, utilizing the EPA 9 elements of watershed plans, will be completed in FFY09. EPA is very interested in this guidance and will be involved in the development process. This guidance may be transferable to other states.
- **Improve Civic Engagement in restoration and protection:** The MPCA will be working closely with the Clean Water Council on initiatives to improve the participation of citizens and stakeholders in restoration and protection activities. The Council is recommending state funding for needed research, pilot projects in key watersheds, and to evaluate a statewide media campaign.
- **Implementation Grant Funding Priorities:** The Clean Water Legacy Act specifies criteria for allocation of implementation funding. The MPCA will be working with other state agencies and the Clean Water Council to develop more specific ranking criteria, including prioritizing of some funding to threatened waters and watersheds.
- **Continue integration of TMDL wasteload allocations into stormwater and wastewater permits.** In addition to the Minnehaha Creek Watershed stormwater pilot project with EPA mentioned above, the MPCA is conducting policy discussions on the reissuance of the industrial stormwater permit in FFY10 and the MS4 permit in FFY11 to seek opportunities to improve the impaired waters requirements of these permits. We will also be working with stormwater staff on pilot projects and guidance to improve implementation of TMDL requirements. The stormwater program now has two liaison staff leading these efforts. The wastewater program has one liaison staff assigned to coordination duties and will be working on a policy and communications agenda over the next four years.

**FFY 2009 Report:**

As of September 2009, MPCA has approved 20 TMDL implementation plans.

Guidance for TMDL implementation plan development, utilizing the EPA 9 elements of watershed plans, will be completed in FFY10.

MPCA is working closely with Clean Water Council civic engagement sub team. The state legislature appropriated \$250,000 for FY10-11 for this program development work to continue. The development work includes defining basic requirements for civic

engagement and providing resources to ensure the basic requirements are implemented statewide. Also, MPCA put out an RFP using "Stimulus" funds for assistance with promoting civic engagement in watershed planning and Total Maximum Daily Loads (TMDLs).

MPCA implemented Clean Water Council recommendations for priorities in scoring and allocating FFY10 Section 319 funding, and gave priority to protection projects in FY10 Clean Water Partnership funding.

Coordination is ongoing between the TMDL program area and the stormwater and wastewater programs. MPCA and EPA are developing a potential watershed stormwater permit pilot for a watershed District in the east Twin Cities Metro Area in FFY10. MPCA produced a policy on nonpoint discharges to regulated MS4s. MPCA produced guidance on writing TMDL implementation plans that have a regulated stormwater component. MPCA produced several fact sheets describing regulated stormwater BMPs that can be included in a TMDL Implementation Plan. MPCA staff have developed a guidance document and TMDL language intended to assist NPDES permit writers to appropriately interpret wasteload allocations for the development of water quality based effluent limitations. The language will appear in TMDL wasteload allocation and implementation sections starting in FFY 2010.

**Additional information:**

For more information on the Impaired Waters Joint Priority, contact:

At MPCA, Glenn Skuta at 651-297-3365 or [glenn.skuta@state.mn.us](mailto:glenn.skuta@state.mn.us);

At EPA Region 5, Dean Maraldo at 312-353-2098 or [Maraldo.Dean@epa.gov](mailto:Maraldo.Dean@epa.gov)

## ***WQ Monitoring***

**October 1, 2008 – September 30, 2012**

### **Objective:**

MPCA and EPA Region 5 propose to collaborate to enhance our monitoring and assessment efforts so that each agency will have sufficient data available to assess the condition of the states' waters, identify stressors and sources of water quality impairments/threats, and measure changing environmental conditions to support Clean Water Act program needs and track our progress protecting and restoring water quality.

### **Statement of Environmental Problem/Issue:**

Effective and comprehensive water quality monitoring is an essential part of our environmental protection and restoration efforts. Monitoring information is needed to assess the condition of water quality within a State or the Region, identify pollutant sources/threats, detect new and emerging water quality problems and evaluate and inform the effectiveness of water quality protection and restoration programs. Data management and reporting are also key to ensuring the data collected is available to partners and stakeholders, and also that partners and stakeholders can contribute their monitoring data to assessment and management efforts.

The passage of the state Clean Water Legacy Act (CWLA) in 2006 significantly increased the State of Minnesota's investment in and support of water quality monitoring. The law led to one-time appropriations for fiscal years 2007 through 2009 (\$24.95 million in FY 2007 and \$54 million in FY2008-09) for the following activities:

- Accelerate monitoring and assessment of Minnesota's waters with a goal of comprehensive assessment every 10 years.
- Develop TMDLs with an emphasis on 3<sup>rd</sup> party projects led by local government and other local agencies.
- Provide grants to implement TMDLs and protection activities through existing state and local programs designed to improve water quality.

With this heightened level of effort comes a greater need for support and flexibility from EPA in conducting water monitoring activities in a manner that meets both state and federal expectations.

The passage of the CWLA and associated funding has allowed the MPCA to make significant progress implementing the lake and stream components of the 2004 Minnesota Water Monitoring Strategy. Continued attention is needed during this PPA cycle to maintain this progress, and to further develop Minnesota's monitoring and assessment activities. Identifying monitoring and assessment as a joint priority for the next four years will provide continued focus and attention on collecting and managing the data necessary for both agencies to better understand the quality of the state's rivers, streams, lakes, wetlands and groundwater and to target future work. Identification of data

management and integration needs will help EPA and MPCA effectively target resources, programs and efforts on the most significant environmental problems and achieve measurable environmental outcomes.

### **MPCA Monitoring and Assessment Priorities for FFY 2009-2012:**

#### **1. Continue to implement the 2004 Minnesota Water Monitoring Strategy:**

Continue implementation of the Minnesota Water Monitoring Strategy, including continued coordination among the Minnesota Department of Health (MDH), Board of Water and Soil Resources (BWSR), Minnesota Department of Natural Resources (MDNR) and the Minnesota Department of Agriculture (MDA) on surface- and ground-water monitoring. Continue to identify and prioritize gaps that need to be filled, and identify and target additional resources that would be needed to fill the remaining gaps (funding to be provided as available). Additional activities under this priority include the following:

- Identify additional training, guidance and tools that are needed to improve monitoring programs within the state and EPA.
- Attend and participate in the annual Surface Water Monitoring and Standards Meeting.
- Refine the Water Monitoring Strategy to reflect the watershed approach (see next priority), and determine if any additional changes are needed to measure attainment or progress toward our shared environmental goals for water including those in EPA's Strategic Plan and those identified in MPCA's Monitoring Strategy.

#### **FFY 2009 Report:**

MPCA continued to refine the details of the Water Monitoring Strategy, including the watershed approach. A "condition monitoring" site was added to the MPCA web site <http://www.pca.state.mn.us/index.php/water/water-monitoring-and-reporting/water-quality-and-pollutants/water-quality-condition-monitoring/water-quality-condition-monitoring.html> and the strategy was posted there along with supporting documents and details. Staff attended and presented at the annual SWiMS meeting in February 2009.

#### **2. Develop a statewide Watershed Approach to prioritize and integrate Monitoring and Assessment, TMDL, and Restoration and Protection Activities:**

Under the CWLA and the Minnesota Water Monitoring Strategy, the MPCA is relying on a watershed approach to monitor and understand lake and stream water quality. The idea behind the watershed approach is to intensively monitor the streams and lakes within a major watershed to determine the overall health of the water resources, identify impaired waters, and identify those waters in need of additional protection efforts to maintain high quality and prevent impairments. Follow-up monitoring is done in biologically impaired subwatersheds to determine the cause(s) of the impairments (the "stressors" impacting the biological community) and to begin to identify pollutant sources.

The watershed approach is not just applicable to monitoring and assessment. The MPCA



is exploring ways to synchronize TMDL development and implementation in major watersheds within 2-3 years follow monitoring and assessment of the same watersheds. The current plan is to complete assessment of all of the state's major watersheds over a 10-year period, at a rate of about 8 watersheds per year. TMDL studies will begin 2-3 years following completion of assessment. The planning process will ultimately result in a watershed plan that integrates both restoration and protection implementation activities, consistent with EPA's watershed planning (9 element watershed plans) approach.

Over the next four years, the MPCA will rely on pilot efforts and other design activities to fully integrate the watershed approach into our water work. The information gained through the watershed monitoring approach will help inform this broader design effort.

**FFY 2009 Report:**

The 2009 Minnesota Legislature provided funding to fully implement the watershed monitoring approach in state fiscal years 2010 (beginning July 1, 2009) and 2011. The MPCA is making good progress on integrating the watershed approach into its operations. Link to the Watershed Approach Fact Sheet Summary is posted at: <http://www.pca.state.mn.us/index.php/water/water-types-and-programs/surface-water/basins-and-watersheds/watershed-approach.html>

Design and initial implementation of stressor identification monitoring, watershed modeling, implementation planning, and related activities continues.

Intensive watershed monitoring was initiated in seven additional major watersheds. A process for annually updating the watershed schedule was also developed; the schedule will be updated each spring. A short document (Watershed Monitoring Approach Report) describing the watershed monitoring approach was also finalized, and is available on the MPCA web site at: <http://www.pca.state.mn.us/index.php/water/water-types-and-programs/surface-water/basins-and-watersheds/watershed-approach.html>

along with a summary of condition monitoring activities completed in 2008 (2008 MPCA Condition Monitoring Summary), available at:

<http://www.pca.state.mn.us/index.php/water/water-monitoring-and-reporting/water-quality-and-pollutants/water-quality-condition-monitoring/water-quality-condition-monitoring.html>

Numerous presentations were provided to agency partners and stakeholders to explain the watershed monitoring approach.

**3. Continue to develop tools for stream biological monitoring and assessment:**

The MPCA has developed and is implementing a robust stream monitoring effort that integrates biological, chemical and physical monitoring to assess stream condition. Continued work is needed to finalize a statewide stream classification system, develop an IBI for each stream type and establish a biological condition gradient for the state. Technical support and funding are needed from EPA to continue progress in this effort, so the goal of achieving a "Level 4" biological monitoring program, including establishing a Tiered Aquatic Life Use (TALU) classification system, can be met for Minnesota.

**FFY 2009 Report:**

The Minnesota state-wide biological database has been analyzed to develop 7 fish and 9 invertebrate classifications to minimize natural variability within them. Custom indices of biological integrity (IBIs) are being developed for each one of these classes (expected to be completed by spring 2010). In addition, biologists from around the state have met twice in 3 day workshops to develop bio condition gradients to help determine the appropriated thresholds for biological condition in each of these classes. These were facilitated and technically supported by MPCA paid contractors and with EPA staff participation.

The MPCA continues to pursue the development of Tiered Aquatic Life standards. Public and stakeholder meetings were held to gather information to help develop the standards and the implementation plan.

#### **4. Continue to implement probabilistic monitoring:**

The MPCA actively participates in the National Aquatic Resources Surveys (National Lake Assessment Program (NLAP), National Rivers and Streams Assessment (NRSA), and also conducts its own probabilistic stream survey for the state. The stream sampling design has evolved from a rotating basin-scale approach (from 1995 to 2005) to an ecoregion-scale design coinciding with the NRSA in 2008-2009 and into the future. The MPCA is also leading a state-level wetland quantity and quality survey with support from an EPA grant. Continued technical and financial support is needed from EPA to design and implement probabilistic monitoring efforts. The MPCA will continue to participate in the national survey effort, completing the NLAP data analysis as data becomes available, assisting in the NRSA, and participating in the National Coastal Condition Assessment and National **Wetland** Condition Assessment planning and monitoring efforts over the next four years.

#### **FFY 2009 Report:**

MPCA staff and leadership participated in planning efforts for the National Coastal Conditions Assessment. Site reconnaissance was also completed for the NRSA. Using 106 Monitoring Initiative funding the MPCA will be conducting its own probabilistic survey of streams at 150 sites in 2010. These sites were randomly picked by EPA statisticians. Fish and invertebrate community, mercury in water, and emerging pharmaceutical and personal care product chemicals will be sampled.

#### **5. Support the development and implementation of the Minnesota Wetland Monitoring Strategy:**

Minnesota has drafted a strategy that includes 1) Random plot sampling (quality and quantity); 2) Update of the National Wetland Inventory, and 3) An electronic GIS tracking inventory. During the next four years, the MPCA will implement the water quality sampling strategy, look for collaborative funding for the NWI update and tracking system with MDNR and BWSR and seek permanent funding for the random monitoring. Continued technical assistance and competitive funding opportunities are needed from EPA to help support this ongoing effort.

#### **FFY 2009 Report:**

The probabilistic sampling for both the quantity of wetlands and the quality of wetlands has been completed for the first 3-year rotation with a report expected to be completed by spring 2010. Long term Minnesota Department of Natural Resources funding has been secured to continue the wetland quantity parts of the survey. EPA Wetland Development Program grant partially funded the sampling to determine the quality of depressional wetlands by MPCA staff which is being discontinued. An additional source of funds is needed.

State funds were obtained for the 2009-2010 fiscal years to update the National Wetland Inventory in the 7 county metro areas. Additional funding has been sought to continue the update in more counties.

A contractor has completed a feasibility report for the GIS tracking inventory system. No funds are available to implement it at this time.

**6. Continue to enhance data management and access to water quality monitoring data, including spatial information:**

The MPCA is in the process of developing a replacement system to the EPA STORET water quality data management system. MPCA is participating in a multi-state consortium to develop a replacement (with EPA support), and is also identifying user requirements and opportunities for enhancing data access and retrieval while replacing the STORET system. Continued support from EPA is needed as this effort moves forward.

In addition to the STORET replacement effort, the MPCA is developing an information management system for elements of its watershed programs, including monitoring and assessment. This system will pull from existing databases such as STORET (or its replacement), the Environmental Data Access system and the Assessment Database (ADB), and may also involve the development new data systems to fill identified gaps.

A key element of the watershed information management system will be the use of geographic boundaries to organize and display information. To assist in this and help avoid confusion in the assessment and listing process as well, the MPCA is also interested in continued coordination and cooperation among MPCA, MDNR and EPA regarding the state's watershed boundary GIS data.

**FFY 2009 Report:**

Efforts continued to identify a preferred strategy for replacing the STORET data system. The MPCA completed its involvement in the multi-state consortium, and also wrapped up the development of user requirements for the replacement system. The requirements were compared to available options, and the MPCA is currently exploring the potential for purchasing a commercial software package to meet the identified needs.

Regarding the watershed information system effort, business and system requirements were identified, and a report including the requirements and a plan for development of the full system was completed in FFY09. A contracts database selection project is

underway in early FFY10 with the Minnesota Management and Budget Office. Two other components of the overall system will begin development in FFY10 - the "GIS" component and the "managing waterbodies" component.

**7. Continue efforts to assess and list impaired waters:**

The MPCA continues to submit a list of impaired waters to EPA following the Consolidated Assessment and Listing Method categories, and using the EPA Assessment Database (ADB). The MPCA's move towards a watershed approach to monitoring and assessment, TMDL, and restoration and protection activities may necessitate adjustments to the impaired waters listing process to achieve the desired integration among those activities. Refinements to the MPCA's copy of the ADB may also be needed to meet identified information needs.

Over the next four years, the MPCA will work with EPA to identify and implement opportunities to refine the listing process to align with the watershed framework while continuing to meet state and federal goals and requirements. MPCA will also continue to update its assessment approach and guidance based on new information and revisions to the state's water quality standards.

**FFY 2009 Report:**

The 2010 listing cycle proceeded on schedule. Data analysis was completed in winter 2009, and professional judgment meetings were held during spring 2009. A series of public meetings on the draft list were held in late September/early October, 2009. An effort to develop a watershed assessment approach was also initiated, and will be piloted in a few watersheds in winter 2010 to explore options for better aligning the assessment and listing process with the watershed framework in advance of the 2012 listing cycle.

**Additional information:**

*For more information on the Monitoring and Assessment Joint Priority, contact:  
At MPCA, Shannon Lotthammer at 651-297-8355 or [shannon.lotthammer@state.mn.us](mailto:shannon.lotthammer@state.mn.us)  
At EPA Region 5, Sarah Lehmann at 312-353-4328 or [lehmann.sarah@epa.gov](mailto:lehmann.sarah@epa.gov)*

## ***Midwest Clean Diesel Initiative***

**October 1, 2008 – September 30, 2012**

### **Objective:**

Both agencies seek a well coordinated effort to reduce diesel emissions, with clear and measurable outcomes.

### **Statement of Environmental Problem/Issue:**

Diesel engines emit a disproportionately higher amount of pollution than gasoline engines – especially particulate matter. Diesels also have a much slower fleet turnover rate due to their extreme longevity. The challenge is to reduce diesel emissions through a reduction in idling and retrofitting legacy diesel equipment, even though our state is in compliance meeting all federal air quality standards -- making any diesel retrofit a voluntary action.

### **Actions to be accomplished or Progress Update:**

1. MPCA will provide loans to qualified small businesses for idle reduction devices.
2. Provide EPA with a state diesel emission reduction plan by December 1, 2008 that will result in retrofits and idle reduction education for Minnesota's "legacy fleet" of school buses (currently estimated at slightly over 4000 buses) and other diesel fleets, and will establish substantial reduction targets for port equipment, heavy construction equipment and specific sector based initiatives, such as solid waste collection vehicles.
3. Establish financial support for the state diesel emission reduction plan by applying for federal grant awards, or state legislative initiatives, as appropriate. MPCA's clean diesel program replaced the previous staff and supervisor as the program moved to a new MPCA unit on September 2.

### **FFY 2009 Report:**

#### **1 MPCA Clean Diesel Loan Program**

Originally, loans were offered for the items listed below through our Small Business Environmental Improvement Loan program. During the past three years MPCA issued 70 loans totaling over \$787,000 for idle reduction equipment. Because of available DERA funding MPCA was able to create a dedicated loan program specific to idle reduction efforts. This has freed up funding from the Small Business Environmental Improvement Loan program to go toward dry cleaners and other small businesses for the purchase of equipment that meets or exceeds environmental regulations. Due to a grant program established through stimulus funding (ARRA), activity for the APU (idle reduction) loan program has been quiet. Recently however,

one loan for idle reduction equipment has been awarded and two more are pending. Additional applications are expected in the near future.

## 2 Minnesota Clean Diesel Reduction Plan

MPCA, working with Clean Air Minnesota (CAM), the state's Clean Diesel Coalition, developed a Statewide Diesel Emission Reduction Plan in late 2008, which was then revised with EPA input in early 2009. **The overarching goals of this plan are to 1) maximize diesel emission reductions by utilizing the most feasible, economical and appropriate technologies or processes 2) obtain the greatest number of health, economic, and education co-benefits 3) leverage public, private, local, state and federal resources 4) identify opportunities for new partners and new emission-reduction work.** The plan also identified opportunities for work in various sectors, discussed what has occurred in some of these sectors, as well as objectives for 2009. Among these sectors:

- School buses: MPCA continues to partner with Project Green Fleet (PGF), a program of the Minnesota Environmental Initiative (and a partner in CAM) through financial and technical support. This includes providing funds from the state Legislature, and MPCA's standard Diesel Emission Reduction Act (DERA) state allocation. Progress continues and approximately 520 school bus retrofits will have been done in the 2009 calendar year instead of the original goal of 700. The goal had to be scaled back by MEI because both the state and DERA grant funding arrived later than anticipated. This will bring the cumulative project total of retrofit school buses to 1,800 by December 31, 2009. Additional federal funds have been secured by MEI to complete several hundred additional retrofits in 2010.
- Other on-road fleets: Both MPCA and PGF have expanded their work with other public and private on-road fleets through available DERA ARRA (American Recovery and Reinvestment Act), CMAQ (Congestion Mitigation and Air Quality), and other funding sources. MPCA has continued implementation of the CMAQ federal grants for the Twin Cities metropolitan area public heavy duty retrofits. MPCA has been working with MnDOT and several metropolitan county/municipal fleets. As of Sept. 30, approximately 200 public heavy duty vehicles have been retrofitted with many more slated for 2009/2010. The CMAQ project has expanded to include retrofits of Minneapolis and St. Paul City fire trucks – this bid award should be finalized through the MN Department of Administration in November.
- Off-road fleets: Through ARRA DERA funds, both MPCA and PGF will be able to expand retrofit efforts to off road equipment including construction, rail, and marine.

- MPCA added language to construction contracts (landfills, LUST projects) that requires winning construction bidders to reduce emissions through idle reduction practices and use of higher biodiesel blends.
  - Additionally, MPCA also continues to work with PGF to encourage emission reduction language and possibly offer emission reduction grants (through MEI) for the construction equipment of contract bid winners on the Central Corridor Light Rail. A recent meeting with Central Corridor staff indicates a willingness to include some type of emission reduction requirement, or strongly encouraged language in future bid specs for various construction projects. Examples include reduced idling policies, emission control devices and the use of cleaner fuels.
  - Idle Reduction: MPCA staff participated in ‘fleet management events’ throughout the state, called Clean Diesel Road Shows, which brought together public and private fleet owners interested in reducing diesel emissions through idle reduction practices. The Road Show events were coordinated by MEI and other CAM partners. MPCA staff also participated in the 2008 and 2009 Midwest Clean Diesel Initiative Conference held in Region 5’s Chicago office.
- 3 MPCA continued to support school bus retrofits in the state by awarding an additional \$1.2 million in state funding in 2009 to Project Green Fleet, allowing for at least 550 additional retrofits by 2011. This is in addition to the \$1.2 million awarded to PGF in 2008 for school bus retrofits.
  - 4 MPCA applied for and received \$1.73 million in ARRA-DEIRA funds awarded through the state clean diesel grant program in April 2009. These funds allow MPCA to further the goals of the state’s Diesel Emission Reduction Plan by offering financial resources to public and private fleets for diesel emission reduction work. MPCA released an RFP for \$1.56 million available public and large and small private diesel vehicles including long-haul trucks, marine and construction equipment. Categories included auxiliary power units (APUs), trailer refrigeration repowers, engine repowers and emission reduction retrofits. The grant was promoted through targeted associations and vendors along with mainstream news media. It was opened in June to public and private fleets of all sizes. 125 applications were received. Applications were screened and categorized, followed by a random selection process by category with witnesses. These identified 61 grantees that were notified in August. Due to administrative delays, grant agreements were still in the process of being sent out as of September 30, 2009, but MPCA is actively working to get agreements sent out.

MEI, one of MPCA’s main partners in clean diesel work, applied for and received approximately \$3 million in ARRA-DEIRA competitive funds. These funds will be used to continue the work of the state’s diesel emission reduction plan, including additional school bus retrofit work, as well as expanded retrofit efforts to other public and private on and off road fleets.

5. MPCA has taken steps last fall to look into new diesel areas, by adding a \$57,000 pilot project to its DERA plan - aimed at reducing diesel emissions by repowering aircraft tugs used at MSP Airport.

**Joint Priority Responsibilities:**

1. Advocate participation and actively solicit membership in EPA's SmartWay Transport program by Minnesota trucking companies. (Mike Nelson)

**FFY 2009 Report:**

During the FFY2009, the MPCA promoted the SmartWay Transportation program through the MPCA Small Business Auxiliary Power Unit (APU) Loan Program. The SmartWay program was referenced in materials provided to small trucking companies interested in purchasing an APU to reduce their diesel emissions through this idling alternative.

2. Partnership and participation in EPA's Midwest Clean Diesel Initiative. MPCA will provide staff and leadership support for this effort and participate in and/or coordinate with Midwest Clean Diesel activities. EPA Region 5 will coordinate the Midwest Clean Diesel Initiative and offer technical and financial resources, where available, in support of Minnesota's diesel emission reduction plan.
3. Participation and financial support for Project Green Fleet continues. PGF is an innovative voluntary approach to accomplishing retrofits and commitment to diesel idling reduction through a private-public partnership. MPCA is currently committed to develop in partnership with Clean Air Minnesota, a statewide diesel emission reduction plan based on this model. Project Green Fleet is a significant component of that plan
4. Offer opportunity for Supplemental Environmental Projects. MPCA will offer diesel retrofits, installation of Auxiliary Power Units and other diesel reduction activities as a SEP, at every applicable enforcement opportunity.
5. Participation in CenSARA's Blue Skyways Collaborative. MPCA will seek other federal funding for reduction in idling and retrofits. EPA Region 5 will support MPCA's efforts with EPA Region 6 & 7.
6. Offer financial support. EPA Region 5 will seek to allow attainment states to participate in funding opportunities for diesel reduction projects.

**Additional information:**

*For more information on the Midwest Clean Diesel Initiative Joint Priority contact:*

*At MPCA: Rick Patraw, 651-215-0193, [rick.patraw@state.mn.us](mailto:rick.patraw@state.mn.us)*

*At EPA Region 5: Steve Marquardt, 312-353-3214, [Marquardt.Steve@epa.gov](mailto:Marquardt.Steve@epa.gov)*



## ***Home Land Security***

**October 1, 2008 – September 30, 2012**

***Part 1: Preparedness for managing and decontaminating debris, structures, and places contaminated by biological, chemical, or radiological materials.***

### **Objective:**

To be prepared for management and decontamination of contaminated debris. USEPA and MPCA will cooperate in preparedness training and exercising for management of debris and decontamination of structures and places contaminated by biological, chemical, or radiological materials or agents.

### **Statement of Environmental Problem/Issue:**

Debris and contaminated debris remains after the rescue and public safety phase of a terror event or a nuclear power plant off-site release.

### **Actions to be accomplished or Progress Update:**

1. During the period of this PPA MPCA and USEPA agree to attempt to present at least two major decontamination training and exercise events in Minnesota. The suggested scenarios for the training and exercise events are: 1. decontamination of a public building by a biological agent for one event; and 2. management of off-site materials and properties (such as fields and milk and hay and houses) contaminated by a nuclear power plant release suggested for the second event.
2. For each of the training and exercise events USEPA Regional and National Decontamination Team experts as available will present a day-long workshop on the selected decontamination and debris management topic. MPCA will invite appropriate staff from MPCA, other state agencies, city and county agencies, facilities, and contractors to the training. MPCA will handle the logistics of the training session.
3. Approximately 3 months after the training session USEPA and MPCA will co-lead a tabletop exercise. The exercise will be designed to practice or test the roles, capabilities, command, and technical aspects of scenarios for the selected bio/chem/rad agents. MPCA will handle the logistics of the training session. USEPA will bring appropriate EPA experts as available, and will request participation by appropriate experts of other national response organizations that would play important roles in an incident (e.g. NRC, ATSDR, military). MPCA will bring appropriate state experts, and will request appropriate local, facility, and contractor experts.
4. Following the training and tabletop USEPA and MPCA will endeavor to improve identified gaps or capability weaknesses

**FFY 2009 Report:**

1. On April 30, 2009, EPA regional and headquarters staff, NRC staff, American Nuclear Insurers, FEMA, HSEM staff presented training on the assessment and recovery phase of an off-site release from a nuclear power plant to audience of state, local, and federal responders and planners. On May 1, 2009, presenters and audience participated in a facilitated discussion/exercise of the issues related to assessment, cleanup, and re-entry into evacuated areas on the management of contaminated lands and materials.

EPA committed to arranging further training and exercising on this topic.

**Joint Priority Responsibilities:**

1. Stephen Lee, MPCA
2. Len Zintak, EPA
3. Jason El-Zien, EPA

**Additional information:**

At MPCA, Stephen Lee, Manager, Emergency Response and Preparedness 651-757-2160 or [stephen.lee@state.mn.us](mailto:stephen.lee@state.mn.us)

At EPA, Len Zintak, 312-886-4246 or [zintak.leonard@epa.gov](mailto:zintak.leonard@epa.gov); or EPA, Jason El-Zien, 312-886-6039 or [el-zein.jason@epa.gov](mailto:el-zein.jason@epa.gov)

***Part 2: Natural Disaster Debris***

**Objective:**

To prepare for debris from natural disasters, including supporting local government's management of debris; managing orphan oil and chemicals; and overseeing responsible party cleanups of oil and chemicals spilled in a natural disaster.

**Statement of Environmental Problem/Issue:**

Natural disasters such as floods and tornadoes can spill and spread oil, chemicals, and demolition debris.

**Actions to be accomplished or Progress Update:**

1. MPCA will maintain existing MPCA's Emergency Operating Plan and its guidance for natural disaster related debris, including management of oil and chemical debris, household hazardous wastes, etc. USEPA concur.
2. USEPA will review and comment on MPCA's natural disaster related debris guidance, and will provide advice and examples of other states' and federal debris guidance. USEPA concur.

USEPA is developing a website which will provide advice and examples of debris guidance. USEPA will provide comments on MPCA developed guidance.

**FFY 2009 Report:**

1. MPCA significantly updated debris management guidance materials following the threatened flooding of the Red River of the North. Updated guidance is being compiled into a Stand Operating Guidance (SOG) which will be forwarded to EPA on completion, anticipated winter 2009. USEPA concur.

**Joint Priority Responsibilities:**

1. Stephen Lee, MPCA
2. Paul Ruesch, EPA Land and Chemicals Division

**Additional information:**

At MPCA, Stephen Lee, Manager, Emergency Response and Preparedness 651-757-2160 or [stephen.lee@state.mn.us](mailto:stephen.lee@state.mn.us)

At EPA, Paul Ruesch, Land and Chemicals Division 312-886-7898 or [ruesch.paul@epa.gov](mailto:ruesch.paul@epa.gov)

***Part 3: Water/Wastewater Agency Response Network (Warn)***

**Objective:**

Support local water and wastewater utility mutual aid and other emergency preparedness.

**Statement of Environmental Problem/Issue:**

The Water/Wastewater Agency Response Network (WARN) is a developing partnership between many of the State's water and wastewater utility officials. The WARN system seeks to provide for mutual aid between the utilities when one has suffered man-made or natural disaster WARN will also facilitate mutual training for the utilities.

**Actions to be accomplished or Progress Update:**

**The Minnesota Water/Wastewater Agency Response Network (MNWARN) is a system of members of the water/wastewater regulated community that have come together to address, mutual aid during man-made and natural disasters. MPCA and EPA agree to**

- a) As requested support and assist the Minnesota drinking water and wastewater utilities WARN program in order for them to prepare for mutual assistance during natural and man-made disasters.

**FFY 2009 Report:**

No specific requests for support from MNWARN

**Joint Priority Responsibilities:**

1. Steve Lee and Wendy Turri of MPCA
2. Nick Damato of EPA

**Additional information:**

At MPCA, Stephen Lee, Manager, Emergency Response and Preparedness at 651-757-2160 or [stephen.lee@state.mn.us](mailto:stephen.lee@state.mn.us)

At EPA, Nick Damato at 312-886-0190 or [damato.nicholas@epa.gov](mailto:damato.nicholas@epa.gov)

At Minnesota Department of Health: Jon Groethe 330-223-7339; or

Minnesota Department of Health: Bob Smude 651-201-4677