FY2014 Members

Auburn

Boylston

Charlton

Dudley

Grafton

Hardwick

Holden

Hopkinton

Leicester

Millbury

Northbridge

Northborough

Oxford

Palmer

Paxton

Rutland

Shrewsburv

Southbridge

Spencer

Sterling

Sturbridge

Upton

Uxbridge

Ware

Webster

West Boylston

Westborough

Wilbraham



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Newton Tedder US EPA Region 1 5 Post Office Square, Suite 100 Mail Code OEP06-4 Boston, MA 02109-3912

February 27, 2015

Sent via email to <u>Tedder.Newton@epa.gov</u> on February 27, 2015

Attention:

n: Comments on the 2014 Draft Massachusetts MS4 Permit Docket ID No. FRL-9917-31-Region-1; Document No. 2014-23262

Dear Mr. Tedder;

The Central Massachusetts Regional Stormwater Coalition (CMRSWC) is a group of 28 towns, most of which are regulated under the United States Environmental Protection Agency's (the Agency's) 2003 NPDES Phase II Massachusetts Small Municipal Separate Storm Sewer System (MS4) Permit. The CMRSWC was formed in 2011 as a regional partnership to manage stormwater programs and ensure the long-term protection of water resources. Working as a group has allowed the CMRSWC to develop tools to expand our stormwater management practices, collectively protect shared resources, and meet the requirements of the 2003 Massachusetts MS4 Permit in an efficient and cost-effective manner.

This coalition has also created an effective forum for collaboration, communication, and discussion among the municipal representatives that attend the regular meetings of our Steering Committee and with other stormwater collaboratives in the Commonwealth of Massachusetts and New England. It is at several of these meetings and at related events that the CMRSWC has discussed the proposed Draft 2014 Massachusetts MS4 Permit that was released for public comment by the Agency on September 30, 2014, hereafter referred to as "the proposed Permit".

The following pages outline the concerns that members of the CMRSWC have with the proposed Permit. Our comments have been organized into two sections: *General* (which describes overarching concerns and concepts); and *Specific* (which apply to unique sections of the proposed Permit). For the latter, we have provided the section and page number of text for ease of reference. Where appropriate, we have provided suggestions for replacement language (or clarification) that would better align the proposed Permit with other MS4 Permits in New England, or have outlined provisions, concepts, or metrics we believe are more suitable or feasible (for in-the-field implementation).



General Comments

- 1. The members of the CMRSWC are supportive of proposed Permit provisions that will directly result in improved water quality, but object to those that are administrative or arbitrary, and that will not have a direct bearing on water quality. We have outlined specific objections as much as possible in our Specific Comments, below.
- 2. We encourage the Agency to update its own guidelines about how regulated communities are expected to balance compliance with the Permit (in its final form) with the ability to afford that compliance without experiencing economic hardship. Since 1997, the Agency has generally considered a maximum combined annual water and wastewater bill of 4.5% of mean household income (MHI)- 2% for drinking water and 2.5% for wastewater services- to be affordable. In their May 2013 "Affordability Assessment Tool for Federal Water Mandates" report, the United States Conference of Mayors, the American Water Works Association, and the Water Environment Federation (see *Attachment A*) argue that MHI is a poor indicator of economic distress, bears little relationship to poverty within the community, does not capture variation across diverse populations, and does not account "for the historical and future trends of a community's economic, demographic, and/or social conditions", especially during recessions and recovery from them, such as Massachusetts is presently experiencing. Municipal revenues are decreasing, and further restrictions on development or redevelopment are not in the best interest of communities struggling to maintain the level of service expected by residents.

Even so, if we were to use MHI as the basis for evaluating a community's ability to afford a stormwater management program to comply with the proposed Permit, the 4.5% MHI cap would easily be exceeded if stormwater costs were included- along with drinking water and wastewater- in the calculation. This is true whether a community funds its program traditionally through the tax base or has developed a sustainable funding mechanism such as a stormwater utility or stormwater enterprise fund. In some rural Massachusetts towns, the cost of stormwater compliance will exceed the cost of wastewater compliance and the total cost for compliance with water regulations may well be closer to 10% of MHI. Leaders and administrators in these towns will have a difficult task, indeed, to convince their residents and business owners that some of the provisions in this proposed Permit will result in water quality improvements commensurate with the expense.

Finally, several members of our community have calculated (or begun the process of calculating) their increased cost of compliance with the proposed Permit as compared to the 2003 MS4 Permit. In 2014, as part of an ongoing partnership between the CMRSWC, the Massachusetts Department of Environmental Protection (MassDEP), and the Worcester Polytechnic Institute's Integrated Qualifying Project (IQP) program, three of our member communities (Holden, Millbury, and Southbridge) participated in a project to quantify current and projected stormwater program costs (see *Attachment B*). The IQP report team assumed that provisions of the proposed Permit would be implemented as drafted, and evaluated the cost of new and expanded provisions as well as maintaining compliance with other Permit provisions. Among the conclusions, the IQP report team calculated the annual costs for implementation of the proposed Permit for the towns of Holden (\$258,790), Millbury (\$753,173), and Southbridge (\$343,008). These projected costs represent increases of 39%, 30%, and 28% over current annual stormwater program budgets, respectively, and do not include other one-time or intermittent costs (such as capital expenditures like equipment), or the costs of design and construction of projects that may be required to eliminate illicit discharges. Even allowing for the imprecision inherent in a project of this scale, the consistency in comparative relative increases calculated for three three communities tells a story that will be repeated across the Commonwealth.

We all agree that clean water supports our communities in many, many ways; notwithstanding this, the absence of guidance on how to best afford the increased costs of stormwater management cannot be ignored.

3. We encourage the Agency to include flexibility in the final Permit with respect to the date on which the Permit in its final form will become effective in each community. Flexibility in setting the effective date will allow each town the opportunity to budget for Year 1 and Year 2 tasks, specifically, within the municipal budget cycle, which will likely be out of sync with the Permit cycle. In the last few years, many communities have been telling their leaders and residents that the new Permit would be out "soon" based on updates from the Agency, with the target



issue date moving over the course of several municipal budget cycles. Many of these leaders will face reluctance, skepticism, and frustration when proposing increased stormwater program budgets, and will need to re-educate their decision makers about why these increases are required.

- 4. We believe that many provisions in the proposed Permit do not lend themselves to implementation over a five-year Permit term, at least in a way that is affordable for the regulated communities and that results in meaningful improvements to water quality. Instead, we propose that the Agency extend the schedule for several specific provisions, such as development and implementation of a catchment delineation, over a ten-year period. The Commonwealth of Massachusetts has in place a statutory framework that allows for such an extended timeline as a Compliance Schedule within a NPDES Permit. Indeed, the Agency has taken advantage of this extended schedule in the proposed Permit for the Catchment Investigation Procedure (see Section 2.3.4.8(c)(iii), IDDE Program Implementation Goals and Milestones, Page 37). This compromise will comply with Clean Water Act 402(b)(1)(B) while providing flexibility for the regulated communities. Where we believe this extended schedule is appropriate, we hereafter refer to it in subsequent comments as a "10-year Compliance Schedule".
- 5. When describing dry weather and wet weather screening and sampling and outfall/interconnection screening, the proposed Permit frequently refers to "detectable levels of chlorine". It should be noted that chlorine is detectable in most if not all outfalls and at the perimeter of many of Massachusetts' surface water bodies using many field kits available today, and this detection limit is likely to become lower (identifying smaller and smaller concentrations of chlorine) as technology improves. Treated drinking water entering a stormwater system is the potential source the chlorine indicator is intended to highlight. However, chlorine in drinking water is highly volatile, and decomposes quickly once discharged to a surface water body and exposed to sunlight and the ambient atmosphere. If all outfall samples would demonstrate "detectable levels of chlorine", but the chlorine will degrade quickly within a water body, this parameter ceases to be useful as a screening tool.

We request that the chlorine parameter either be removed from all sections discussing screening methodologies, or that a numeric threshold be established- based on peer-reviewed data- that can correlate a specific elevated detected chlorine concentration to a potential illicit discharge, such as a grey water connection (or the absence of elevated bacteria) or a cross-connection (in the presence of elevated bacteria).

6. We have observed that many provisions in the proposed Permit include the development of a written program, written inventory, written report, written procedures, or other "written" documentation. These proposed provisions counter a shift on the part of many regulated communities to cloud-based infrastructure management systems, such as the online mapping and inspection platform used by our 28 members. Many communities use these cloud-based tools because they work with mobile devices, reduce paperwork, and allow data to be added to a management system in real-time. These tools reduce the amount of inefficient administrative time to enter information into a form or spreadsheet and typically allow towns to create work orders from the field for follow-up or maintenance activities. The data is every bit as useful and accessible and can be readily queried into reports to provide summaries and snapshots.

Managing operations and maintenance procedures through cloud-based systems such as the one the CMRSWC uses is also more effective- if a change is made to a procedure or form on our platform, that change is available immediately to all users in all 28 communities without the need to print new forms, distribute them to all members, and inform our many, many users that the new form shall be used. These workflow improvements should be considered to be enhancements, and encouraged as they are consistent with federal efforts to reduce paperwork and not "overburden the public with federally sponsored data collections", mentioned as the goal of the Paperwork Reduction Act.

We also know that many regulatory agencies like municipalities to maintain hard copies of documents at multiple locations, even though this practice does not lead to improved use of these documents. The *absence* of large volumes of paperwork doesn't mean that a community <u>isn't</u> implementing something any more than the *presence* of many binders means that a community <u>is</u> effectively utilizing the programs in them. Decreasing the use of paper in our work environment is also environmentally preferable.



It is important for both the Agency and the public to realize that increased use of technology and cloud-based tools allows local governments to work more efficiently and respond to their needs and requests more efficiently.

This modernization should be encouraged, and we request the Agency to incorporate flexibility for many of the "written" submittals requested to be implemented as modules within asset management platforms, and allow the permittee to demonstrate by other methods that these procedures, inventories, etc... exist and are being utilized.

7. We strongly encourage the Agency to engage in conversations and workshops that lead to development of a Final MS4 Permit that MassDEP is willing to sign onto. The alternative to a joint Permit, outlined by the Agency's Thelma Murphy at a meeting of the Northern Middlesex Stormwater Collaborative in Lowell, MA on December 4, 2014, would be two separate Massachusetts MS4 Permits: the current 2003 Massachusetts MS4 Permit would continue to be enforced by MassDEP, and the new Final Massachusetts MS4 Permit would be enforced by the Agency. Mayhem would ensue due to administration, operations and maintenance, and coordination duplication resulting from each of the Commonwealth's regulated communities being subject to two separate, parallel MS4 Permits. In practice, progress toward improving water quality would likely stop as legal challenges were filed, which is not in the best interest of any party involved.

This coordination should begin as soon as possible to reach a version of the permit agreeable to both organizations and compliant with the Clean Water Act, Massachusetts' Surface Water Quality Standards, and associated supporting documentation, so that water quality improvement activities across the Commonwealth can be focused and consistent.

Specific Comments

1. <u>Part 1.10(a), Stormwater Management Program (SWMP), (Page 7).</u> The SWMP is required to describe the specific activities that will be taken, and the schedule for each activity or Best Management Practice (BMP), for the duration of the permit term. This document cannot be developed without thorough coordination of multiple departments and persons within each regulated community, and without each of these departments and persons committing the resources (both time and financial) needed for those activities and BMPs to be completed on the schedule proposed.

The SWMP is arguably the most complicated and detailed submittal in the proposed Permit.

We therefore request that the proposed Permit be revised to require an in-person coordination meeting between the Agency (and MassDEP, ideally) and the regulated community one year after the effective date to review the draft SWMP, with the Final SWMP due one year after that coordination meeting. This gives the regulated community an opportunity to receive intermediate feedback from the Agency and MassDEP, and for corrections to be made, if needed, to ensure that Final SWMP will be acceptable to all parties, reducing revision efforts. This coordination meeting would provide many communities with feedback on their current compliance status (which has not routinely been provided to this point), and allow them to adjust proposed investments in any Minimum Control Measure or TMDL-driven provision that they intend to incorporate into the SWMP.

Part 2.1, Water Quality Based Effluent Limitations (Page 9). This section references Clean Water Act 402(p)(3)(B)(iii), stating that this section of the Clean Water Act prohibits discharges that "cause or contribute to an exceedance of water quality standards". However, the referenced section of the Clean Water Act actually states that Municipal discharge Permits shall require "controls to reduce the discharge of pollutants to the maximum extent practicable", commonly known as MEP.

MEP has long been the statutory standard that governs the level to which municipalities are responsible for limiting and reducing pollution in stormwater, and has been interpreted in many decisions as being subject to certain limitations, including the limits of technology and cost/benefit analyses.



For example, if a community spends \$1 billion dollars on a stormwater treatment project for Pollutant X and continues to contribute 0.01% of the loading of Pollutant X to a receiving water that does not meet water quality standards for that pollutant, that community would be considered to have *satisfied the MEP standard* but would *not comply with the narrative limit* ("contribute to...") proposed in this section. The Agency implies that language in the proposed Permit would *overrule MEP as the accepted standard*, an authority that the Agency does not have over water quality standards in the Commonwealth of Massachusetts.

To eliminate this inconsistency, we strongly request that language in this and other parts of the proposed Permit be revised to clearly establish that MEP standard shall be applied throughout the proposed Permit.

3. Part 2.1.2, Increased Discharges (Page 10): The Agency has been asked at a number of public meetings to provide additional clarification of the meaning of "increased discharge" and "increased loading". Many communities in Massachusetts are presently designing combined sewer overflow (CSO) or other sewer-related improvement projects in compliance with NPDES Permits other than the MS4 Permit. When Long Term Control Plans, inflow and infiltration studies, or other planning documents approved by the Agency require that a community implement methods likes sewer separation to reduce the burden on a treatment facility during wet weather events, the loading of a stormwater pollutant may shift from being delivered to a water body by un- or partially-treated wastewater to being delivered by the engineered stormwater system (albeit with load reduction). Even if we assume that all new stormwater projects are being designed in compliance with post-construction stormwater management, there may be a change in the volume or nature of the discharge of this pollutant. It is also possible that once the project is complete, the pollutant may be discharged to a different water body than the one that received the original CSO bypass.

We realize that the MS4 isn't discouraging progress toward CSO abatement and sewer improvement projects, as these are done to further improvements in water quality. There is, nevertheless, a challenge in demonstrating in the MS4 Permit that the discharge or loading hasn't increased due to the implementation of those projects. The goal of fully integrated planning and permitting has not yet fully materialized, meaning that Towns can't fully "credit" themselves by demonstrating loading reductions to one water body by a project completed in another, nor are the same Agency personnel reviewing proposed projects and reports for the wastewater and stormwater NPDES permits- consistency that otherwise would provide confidence that one NPDES program is not competing or conflicting with another.

To resolve this challenge, please clarify that CSO abatement and sewer improvement projects that have been approved by the Agency (and/or the MassDEP) are exempt from being captured by the definition of "increased discharge" or "increased loading".

4. Part 2.2.1, Discharges Subject to Requirements Related to an Approved TMDL (Pages 11-17). For the first time, many water bodies in our community have been identified as contributing to phosphorus impairments of the Charles River Watershed (Part 2.2.1(b)(i)), phosphorus impairments identified in the "Lakes and Ponds" TMDL (Part 2.2.1(b)(ii)), bacteria or pathogen impairments of multiple water bodies (Part 2.2.1(b)(iii)), phosphorus impairments in the Assabet River Watershed (Part 2.2.1(b)(v)), and/or nitrogen impairments in the Long Island Sound (Part 2.2.1(c)). A cost/benefit analysis of implementing the prescribed corrective waste load reduction actions outlined in Appendix F (and its attachments) has not been completed, nor has an evaluation been performed that models the expected impact of these waste load reductions. This is partially true because the data sets upon which many of these TMDLs was based were very small, used single grab samples, used generic land loadings to calculate watershed contributions, includes some sample data that did not receive full peer review or QA/QC. TMDL authors acknowledged that substantial gaps about influence of stormwater on water quality influenced error. We have not attached these TMDL reports to these comments: we consider these TMDLs to already be part of the public record, as they are referenced within the proposed Permit.

We and many other groups question the validity of basing such an expensive and administratively complex component of the proposed Permit on TMDL reports that are not widely accepted. We request a continued focus on BMPs, both non-structural and structural (at the discretion of the regulated community) as the preferred method



to meet the Maximum Extent Practicable standard in addressing discharges from the MS4 to any of the impaired waters with a TMDL noted above, subject to future updates of these TMDL reports.

5. <u>Part 2.2.2</u>, <u>Discharges to Certain Water Quality Limited Waters Subject to Additional Requirements (Pages 17-22)</u>. Similar to Specific Comment #4, for the first time, many water bodies in our communities have been identified as contributing to both nitrogen (Part 2.2.2(a)) and phosphorus impairments (Part 2.2.2(b))</u>. For both of these impairments, no Total Maximum Daily Loading (TMDL) has been established, and no specific pollutant reduction target has been proposed.

We request a continued focus on BMPs, both non-structural and structural (at the discretion of the regulated community) as the preferred method to meet the Maximum Extent Practicable standard in addressing discharges from the MS4 to any of the impaired waters noted above.

- 6. <u>Part 2.3.2</u>, <u>Public Education and Outreach (Pages 22-24)</u>. As noted previously, flexibility in the Permit will result in the most substantial improvements to water quality. This also applies to a Permittee's authority to direct education and outreach messages to targets it has determined are the priorities for their specific community, rather than mandated messages to mandated audiences. This flexibility is present in most other MS4 Permits in New England, for example Maine's MS4 Permit (effective July 2013, administered by the Maine Department of Environmental Protection; see *Attachment C*) and the 2014 Draft Connecticut MS4 Permit (administered by the Connecticut Department of Energy and Environmental Protection; see *Attachment D*). We request the same flexibility, and the following modifications:
 - a. In (b), replace "shall" with "should", to enable the Permittee to focus messages on the types of properties it has already determined- through its efforts under the 2003 MS4 Permit- to be the highest priority. The Agency should encourage the Permittee to evaluate whether it should target a new audience, but not all audiences exist in regulated communities. Increased flexibility to direct messages to priority targets (rather than to mandated audiences) will result in the most substantial improvements to water quality.
 - b. In (c), replace:

"...shall distribute a minimum of two (2) educational messages over the permit term to each audience identified in Part 2.3.2.b. (The permittee shall distribute at least eight educational messages during the permit term)."

with

"...shall distribute a minimum of eight (8) educational messages over the permit term."

c. In (e), (f), and (g), eliminate the mandate to quantify the effectiveness of each message, each distribution technique, and the overall program. These requirements aim to compel technical and administrative personnel in each regulated community to function as marketing or public relations specialists, where they have not been trained to do so. If and when a community tries a new message delivery mechanism, encourage- but do not mandate- that they report on how well it worked. Towns are not in the habit of sending good money after bad, and will not continue to pay for services or products that it knows are ineffective.

The inclusion of these elements in the final Permit, however well-intentioned, will have the effect of siphoning off a portion of a town's funding to a third party for implementation, losing the connection within the community. Instead, we encourage the Agency to actively share the resources that have been developed (and continue to be developed) within Massachusetts by our group and others, as ways to reduce the burden on individual communities to developing its outreach and education programs.



7. <u>Part 2.3.4.5(c)</u>, <u>Outfall/Interconnection Inventory (Page 27)</u>. The proposed Permit asks the Permittee to physically label all MS4 outfall pipes. This proposed provision is related to public education, not inventory of the system, and should not be included in Part 2.3.4.5. The Agency is already proposing that regulated communities capture information such as pipe and open channel discharge locations under Part 2.3.4.6 (System Mapping, Page 27-28), with the goal of being able to readily locate and mobilize at these locations to perform illicit discharge activities. As such, the Town is already required to maintain outfall location information in the way most useful to it.

Placement of physical labels, such as signs, will be costly and provide no additional benefit to Permittee personnel over and above the system mapping.

We recommend that placement of such signage be considered a potential delivery mechanism in Part 2.3.2 (Public Education and Outreach, Page 22-24) on a location-by-location basis - that is, if the community determines that the placement of such signage in an area would increase the public's understanding of stormwater services provided or help resolve a chronic illicit discharge issue, such as illegal dumping, in that area.

8. Part 2.3.4.6(a)(i), System Mapping (Page 27-28). The number of required mapping elements (ten) and detail to be provided for each far exceeds the system mapping provisions included (or proposed) in any other New England state. For example, the 2014 Draft Connecticut MS4 Permit proposes to require only the type, material, size and location (coordinates) for pipes, swales/ditches/channelized flow, and outfalls, and is considering scaling this list back. The Connecticut permit does not include catch basins, drain manholes, BMPs, interconnections with other systems, or catchment delineations, nor does it require or even recommend that the Permittee map any sanitary sewer infrastructure, unless there is a history of illicit discharges or cross connections in a specific area. We understand the value in documenting the location of many kinds of points of interest within stormwater system infrastructure, but request that this Part be scaled back to focus mandatory future mapping only on outfalls, pipes, catch basins, and drain manholes, with other information to be collected as the Permittee's discretion.

Further, the definition of catchment provided in this section ("the area that drains to an individual outfall or interconnection") differs from the Agency's responses to questions on this provision at public meetings. For example, at a meeting in Lowell, an Agency representative stated the opinion that two catch basins connected to a single outfall pipe would not need to be delineated; in fact the proposed Permit does not include an exemptions for a "small" catchment like this one. We encourage the Agency to define, in the final Permit, some types and configurations of catchments that could be exempt from the delineation requirement, such as this example.

Regardless, inconsistent information such as this example will lead to different interpretations, and data provided by Permittees will not be evaluated on a level playing field. The Agency's ability to provide specific examples of how a community should implement the catchment delineation provision, with visual examples and sample documentation (suitable for a community that does not have GIS capability) would go a long way to providing the needed consistency.

9. <u>Part 2.3.4.7(c.)</u>, <u>Assessment and Priority Ranking of Catchments (Page 30)</u>: We request clarification of the identifying parameters for sewer input based on sampling results. The permit language states that Problem Catchments and High Priority Catchments be categorized by ammonia ≥ 0.5 mg/l, surfactants ≥ 0.25 mg/l and bacteria levels greater than the water quality criteria applicable to the receiving water; or ammonia ≥ 0.5 mg/l, surfactants ≥ 0.25 mg/l, surfactants ≥ 0.25 mg/l and detectable limits of chlorine.

Based on these requirement detection limits, *all three parameters* must be above levels for prioritization into one of these categories. We do not believe this is the intent of the Agency and request clarification on the threshold of these parameters.

10. <u>Part 2.3.4.7(c)(i)</u>, <u>Assessment and Priority Ranking of Catchments (Page 30)</u>. The definition of Low Priority Catchment should allow for categorization based on <u>either</u> the outfall/interconnection screening (Part 2.3.4.7(d)) <u>or</u> the catchment characteristics assessment (Part 2.3.4.7(c)(ii)), but not both.



For example, if a catchment has no history of complaints or reports, has good dry weather water quality (per screening kits), has low development density, contains no industrial or commercial properties, consists of new infrastructure, and is located within a recently-sewered area, then there is hardly justification to require the full scope of screening and sampling outlined in 2.3.4.7(d). The community should be able to consider this example to be a Low Priority Catchment without going to extraordinary efforts, which is the very purpose of defining this category between the Excluded and High Priority categories.

- 11. <u>Part 2.3.4.7(c)(iii)</u>, <u>Reporting dates for Assessment and Priority Ranking of Catchments (Page 31)</u>. The level of effort required for the Assessment and Priority Ranking of Catchments is substantial and will require far more than one year from the effective date to implement. We request that this provision have a submittal milestone closer to 60% of the Permit term (i.e., Year 3 of a five-year permit term or Year 6 of a 10-year Compliance Schedule).
- 12. <u>Part 2.3.4.7(e)(i), Catchment Investigation Procedure (Pages 33-34).</u> This section outlines the System Vulnerability Factors that indicate "a risk of sanitary or septic system inputs to the MS4" under some conditions. These Factors include information that is either subject to the separate NPDES permit for the permittee's publicly owned treatment work (POTW), or is not applicable (for communities that aren't sewered). In either case, the core concept outlined by the Agency in listing these factors is that there needs to be increased cooperation between the entity primarily responsible for the operation of the regulated community's POTW (e.g., Town wastewater department or local sewer district) or subsurface wastewater discharge program (e.g., Board of Health or Code Enforcement Officer) and the entities primarily responsible for compliance with the MS4 Permit (e.g., Public Works Department, Conservation Agent/Commission, or Town Engineer).

The information outlined in the Factors includes data and occurrences that are already routinely tracked by the POTW/subsurface system operator(s). As such, it is much more efficient to require these Factors to be discussed during the development of the SWMP early in the process and reviewed with the Agency at the one year coordination meeting (see Specific Comment #1) than to mandate that the permittee duplicate that substantial effort with a mid-permit term submittal.

- 13. <u>Part 2.3.4.8(a), IDDE Program Implementation Goals and Milestones (Page 36).</u> The level of effort required to complete the dry weather screening and sampling is substantial and will require far more than three years from the effective date. We request that this provision have a submittal milestone at Year 6 of a 10-year Compliance Schedule, or, alternately, that the Permittee be required to <u>begin</u> this task by Year 3 (of a 5 or 10-year Compliance Schedule).
- 14. <u>Part 2.3.4.8(c), IDDE Program Implementation Goals and Milestones (Page 36-37).</u> We request that the first sentence be deleted. As noted in Specific Comment #10, if a catchment characteristics assessment satisfies all criteria in Part 2.3.4.7.(c)(ii)), there is hardly justification to require the full scope of screening and sampling included in the Catchment Investigation Procedure.

Further, the progress milestones for Problem, High Priority, and "all" catchments outlined in (i) through (iii) of this Part are not realistic, given the effort required in performing the Catchment Investigation Procedure, even if Low Priority catchments are excluded. We request that the Agency revisit these progress milestones based on a ten-year Compliance Schedule.

15. <u>Part 2.3.6(a)</u>, <u>Post-Construction Stormwater Runoff from New Development and Redevelopment (Page 39)</u>: The Agency has been asked at a number of public meetings to clarify the intent of the requirement to retain (or provide treatment for) the first inch of runoff from new and re-developed sites that disturb one or more acres and discharge to the MS4.

We similarly request that the Agency confirm that projects such as roadway maintenance projects - including surface overlay, milling followed by overlay, and full-depth reclamation that does not expose the roadway sub-base - are <u>not</u> included in the definition of "disturb". That is, if a community is implementing a maintenance project on an existing roadway, without increasing the area of impervious surface, that no stormwater retention or treatment is



required. The potential unintended result of the alternative interpretation is the crippling of existing pavement maintenance projects- already underfunded- as new stormwater conveyance, storage, and treatment infrastructure is designed, for very little water quality benefit. Another potential unintended result of the alternative interpretation is discouraging redevelopment of urban/brownfields parcels with existing infrastructure in favor of focusing on a previously undeveloped parcel, which would ultimately increase, not decrease impervious area.

Finally, the Agency has acknowledged at public meetings that it is not authorized to supersede a state's water quality-based limits and has previously deferred to the antidegradation policy set forth in Massachusetts' Surface Water Quality Standards, 314 CMR 4.00. Nevertheless, tools for calculating removal efficiencies in this Part are inconsistent with the Massachusetts Stormwater Handbook. Please clarify that the Agency does not intend to challenge or rewrite guidance for design of stormwater treatment BMPs included in the Massachusetts Stormwater Handbook.

16. Part 2.3.6(d), Directly Connected Impervious Area (Page 42): The proposed Permit asks each Permittee to report on impervious area (IA) and directly connected impervious area (DCIA) each year of permit coverage, with the goal of reducing both metrics each year of permit coverage. The Agency has indicated that it will provide a benchmark for measurement of these metrics through maps located on its Massachusetts NPDES website and implies that these maps reflect "subbasins" that are hydraulically connected to a point of discharge. A review of these draft maps shows that development data are not only outdated (e.g., GIS layers dated 2000 through 2010) but also that the subbasins delineated by the Agency do not reflect development. The subbasins shown on these maps are inconsistent with the definition of "catchment delineation" in the proposed Permit (see: Section 2.3.4.6(a)(i), Page 28). That is, the subbasins on maps referenced by the Agency are of undeveloped topography, ignoring the engineered infrastructure and roadway elevations that convey stormwater across a reference area to a point of discharge. In fact, a single subbasin as shown on the Agency's map may include multiple hydraulic catchments.

The value of using IA and DCIA as a surrogate for stormwater pollution is not yet proven, and we believe the Agency, not the regulated communities, should take the lead on gathering data on the correlation between the two. To allow the Agency to develop meaningful IA and DCIA benchmarks, we encourage that the IA and DCIA reporting measure be moved from a Year 2 start date to milestone closer to 80% of the Permit term (i.e., Year 4 of a five-year permit term or Year 8 of a 10-year Compliance Schedule). As a result of this shift, the deadline for submittal of the inventory and priority ranking for installation of BMPs should be shifted appropriately (or deleted entirely, as discussed in other comments we've provided).

17. Part 2.3.7, Good House Keeping and Pollution Prevention for Permittee Owned Operations (Pages 43-49). This Part has expanded substantially from the 2003 version, and with good reason: pollution prevention and good housekeeping are a very effective non-structural BMP for reducing stormwater pollution. Having said that, some sections of this part lack the flexibility inherent in other state MS4 Permits. Some provisions focus too strongly on the specific steps to be taken to reach an objective instead of the objective itself. As an example: Part 2.3.7(a)(ii)(a) includes specific procedures to be implemented for "Parks and open space". One mandated procedure outlined in this section is to establish "pet waste handling collection and disposal location at all parks and open space including the placing of proper signage concerning the proper collection and disposal of pet waste". This specific procedure is inappropriate for a community that has already banned dogs from public parks and open spaces and has successfully enforced that ban. In this case, the mandated placement of pet waste collection stations would work against the implemented dog ban by providing visitors with a disposal location of waste from animals that shouldn't be there, sending mixed signals! This example community is already accomplishing the objective (reducing bacteria and nutrient runoff from a park) through an alternative approach that they decided was most appropriate, and should be permitted the flexibility to stay on the course they have chosen while the goal continues to be achieved. An improvement for our example community could be to encourage (not mandate) them to place signage informing visitors about improvements to water quality in the park (or adjacent water bodies) that have been observed since the pet ban went into effect. We request that this Part of the proposed Permit be revised to focus on the end point or objective rather than the prescriptive steps to reach it.



Further, the progress milestones under all sections of this Part are not realistic, given the effort required in evaluating the range of activities and potential pollution sources across a wide spectrum of permittee-owned facilities and operations. We request that the Agency revisit these progress milestones based on a ten-year Compliance Schedule with the Permit.

18. Part 2.3.7(a)(iii)(b), Infrastructure Operations and Maintenance- Catch Basins (Pages 44-45). A catch basin sump being no more than 50 percent full is described as the threshold for proper function of the basin. This may be accurate, but the inclusion of this metric is arbitrary and not in and of itself protective of water quality. As many commenters will likely note, most Massachusetts regulated communities are already familiar with locations within their MS4 where catch basins receive higher debris and sediment loading and require more frequent cleaning. Most of these communities already inspect and clean these basins more frequently, and include these activities in Annual Reports to the Agency.

Use of the "no more than 50 percent full" metric is preferred over the "twice a year, minimum" metric that has appeared in previous versions of this and related permits. However, if a permittee is mandated to use the "no more than 50 percent full" metric as the threshold for additional cleaning and/or investigation of areas not previously considered a priority, then it's inevitable that other areas will suffer as a result. The end result is that, given current wording, the permittee can be considered non-compliant if a single basin in the system has a sump more than 50 percent full, regardless of whatever increased investment was made in cleaning and inspection activities or net improvements to water quality.

We request that the Agency replace "shall" with more permissive language like "should" in this section, maintaining the "no more than 50 percent full" metric as an ideal to strive for but not a provision that can lead to noncompliance.

Finally, the last bullet in this section asks the permittee to report "the volume or mass of material removed from each catch basin draining to water quality limited waters and the total volume or mass of material removed from all catch basins". The latter part of this provision is feasible, although will require thorough recordkeeping and tedious summaries. The first part, however, is not feasible: regardless of the methodology by which the volume or mass is calculated, the numbers reported would not match reality. No catch basin cleaning technology can remove 100% of the sediment and material in a sump and material density varies, so a calculated volume/mass isn't realistic: at the end of the day, the calculated mass/volume from cleaning X catch basins would not be equal to the mass/volume of material in the truck that cleaned X catch basins. Manifests would never match estimated, reported removal mass/volume and would be flagged in an audit. The potential for a truck to return to the Public Works yard (or other location) after cleaning a single catch basin to be re-weighed (allowing for documentation of the actual mass removed from that basin) is also not realistic. This provision has good intentions, but is not feasible from a boots-on-the-ground perspective. It may be possible for some communities to plan cleaning routes to be watershed- or catchment-specific (allowing a total volume or mass to be quantified for that water body), although in other communities this may be highly inefficient. We request that this bullet be modified to eliminate the "each catch basin" provision.

19. Part 2.3.7(a)(iii)(b), Infrastructure Operations and Maintenance- Street Sweeping (Page 45). The proposed Permit describes each street (with some limitations) being swept a minimum of once per year as the threshold for reduction of sediment loads to surface waters. This may be accurate, but the inclusion of this metric is arbitrary and not in and of itself protective of water quality. Parallel to the argument in Specific Comment #18, most Massachusetts regulated communities are already familiar with locations within their MS4 where streets may contribute higher sediment loading and therefore require more frequent sweeping. Most of these communities already sweep these roadways more frequently than once a year, and include these activities in Annual Reports to the Agency.

We request that the Agency replace:



"...shall be swept and/or cleaned a minimum of once per year in the spring (following winter activities such as sanding)."

with

"...should be evaluated in the spring (following winter activities such as sanding) for the need to be swept and/or cleaned."

This more permissive language maintains the annual evaluation metric as an ideal to strive for, but eliminates a single provision that can lead to noncompliance.

20. <u>Appendix F, Attachment 2.</u> The inclusion of phosphorus reduction credits for an "Enhanced Sweeping Program" or the weekly collection of "Organic Waste and Leaf Litter" from areas that discharge to the TMDL waterbody is self-defeating. Particulate deposition from fossil fuels burned (and brake dust and other pollution) from the equipment needed to implement these collection programs will far outweigh the benefits of the potential phosphorus removed from impervious surfaces. The capital costs for communities to purchase approved, highly-efficient sweeping/vacuum equipment or to set up an appropriate leaf mulching or composting program will make these credits not worth the effort invested.

Further, many of our members that have increased the frequency of street sweeping activities have observed that residents often view these expanded services as an invitation to dispose of trash, leaves, and other materials in roadways. In this way, enhanced street sweeping actually works against litter-prevention efforts.

Finally, as observed at a number of the meetings the Agency hosted during the public comment period, the portion of leaf litter that could be collected from municipal-owned property and impervious surfaces through sweeping activities represents a very small fraction of the leaf litter in the community watershed, as a whole. Efforts to capture this small portion do not represent a strong value compared to other non-structural BMPs our communities are implementing.

These comments have been approved by the CMRSWC's Steering Committee and are strongly supported by our member communities. Attached to these comments (as *Attachment E*) are Statements of Support from our member communities, many of which are also submitting individual comments to the Agency.

We appreciate the opportunity to comment on this proposed Permit, and look forward to the additional protections and clarifications afforded by its consistency.

Sincerely

Adam Gaudette Town Administrator; Spencer, MA

Attachments:

A: United States Conference of Mayors, the American Water Works Association, and the Water Environment Federation. *Affordability Assessment Tool for Federal Water Mandates*. May 2013. (*Attached without appendices*)



- B: Correia, Eric, Michael Giroux, and Cameron Peterson. Comprehensive Cost Analysis of the 2014 Massachusetts MS4 Permit: An Interactive Qualifying Project Report Submitted to the Faculty of the Worcester Polytechnic Institute. December 2014.
- C: Maine Department of Environmental Protection. *General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems*. July 2013.
- D: Connecticut Department of Energy & the Environment. Draft General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems. July 2014. (Attached without appendices)
- E: Letters of Support for these Comments provided by the following municipalities:
 - 1. Charlton
 - 2. Grafton
 - 3. Hardwick
 - 4. Holden
 - 5. Hopkinton
 - 6. Leicester
 - 7. Millbury
 - 8. Northborough
 - 9. Northbridge
 - 10. Oxford
 - 11. Palmer
 - 12. Paxton
 - 13. Rutland
 - 14. Shrewsbury
 - 15. Spencer
 - 16. Sterling
 - 17. Sturbridge
 - 18. Upton
 - 19. Uxbridge
 - 20. Ware
 - 21. Webster
 - 22. West Boylston
- Cc: Robin Craver, Town Administrator (Charlton, MA) Fred Civian (MassDEP Stormwater Coordinator) Aubrey Strause, Co-Facilitator- CMRSWC (Verdant Water, PLLC) Matthew St. Pierre, Co-Facilitator- CMRSWC (Tata & Howard, Inc.)