

To accommodate the many practical municipal matters that Towns will need to discuss as they implement these requirements, and to ensure that Towns consider how they will pay for the development and implementation of these program requirements, EPA ought to consider changing its initial implementation deadlines to be consistent with Annual Town Meetings and should consider incentives for Towns that adopt dedicated funding mechanisms for stormwater programs. MassDEP believes that these two changes will result in greater environmental protection in the long run.

MassDEP commends EPA for considering changes that reduce the cost of complying with the MS4 Permit. However, MassDEP believes that additional changes could be made to streamline the public education, illicit discharge, monitoring, and reporting requirements. See examples below.

The importance of installing structural BMPs at development and redevelopment sites that have or will have impervious surfaces includes addressing the well documented impacts on healthy, native fish communities from stormwater transported by such impervious cover. Indeed, in the context of the Commonwealth's sustainable water management initiative (SWMI), the Massachusetts Department of Fish and Game, the Department of Conservation and Recreation, MassDEP, and the U.S. Geological Survey, have recently investigated the relationship between fish communities in small to medium size MA streams and the effects of anthropogenic alteration, including the amount of impervious cover, and found that impervious cover has a statistically significant negative impact on the fish community abundance and richness. *See Preliminary Assessment of Factors Influencing Riverine Fish Communities in Massachusetts (2010)*, found at <http://pubs.usgs.gov/of/2010/1139>. Consistent with the SWMI work, MassDEP supports the need for meaningful stormwater control measures at development and redevelopment sites in EPA's proposed general permit.

There appear to be disconnects between the named lists of municipalities subject to the proposed permit and the maps of urbanized areas. EPA ought to review its written list of Towns to ensure that it accurately reflects the urbanized area maps that are the basis for including or excluding Towns.

EPA's Non Point Source 319 Guidelines specifically preclude the use of 319 funds to meet conditions of draft or final NPDES permits. Given the detailed nature of the new draft MS4 and RDA permits, it appears that 319 funds are now prohibited for virtually all pollution-reducing stormwater projects inside urbanized areas. Since these areas typically have high concentrations of impervious cover, and impervious cover contributes disproportionately to surface water impairments, these are precisely the areas most in need of access to funds and support for remediation work. We do not believe it was EPA's intent to stop funding projects precisely where the need is greatest and where the work can have the largest environmental benefit.

Stormwater discharges are not specifically defined as a point source in the Clean Water Act. Point sources are defined in 40 CFR 122.2 as follows: "*Point source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged....*" Overland stormwater runoff should not be considered a point source. Until it enters into a piped street storm system, it is not part of a discernible, confined and discrete conveyance.

The new draft MS4 and RDA permits should be consistent with the approach taken in 314 CMR 3.00, the Massachusetts Surface Water Discharge Permit Program, which supports the MS4 program. This approach recognizes that not all pollutants are best managed as permitted point-source discharges. Under 314CMR 3.00, three categories of discharges exist: (3.03) Discharges Requiring a Permit; (3.04) Other Activities Requiring a Permit; and (3.05) Exemptions. MS4 and RDA permits should follow this logical approach. Consistent with EPA's and Massachusetts's watershed approach, this would encourage implementation of a full suite of site-specific nonpoint source best management practices in the watershed, where 319 can be applied to comprehensive remediation and prevention work prior to infrastructure and conveyance systems and end-of-pipe solutions.

The final MS4 and RDA permits should specifically address and define the nonpoint source portion of stormwater runoff, and should further clarify that nonpoint source stormwater runoff can be managed and funded through nonpoint source programs, including where a TMDL is in effect.

Specific Comments

Section 1.10 EPA ought to consider changing the deadline that the SWMP must be completed to better align with municipalities' Annual Town Meetings in the spring. The purpose of this change would be to ensure that municipalities' legislative bodies have the opportunity to include any increased program costs or proposals for dedicated funding stormwater programs before the first SWMP is required.

Section 2.2.1 In this part EPA proposes different standards and different time frame requirements for maintaining and/or reducing individual TMDL pollutants. EPA ought to consider allowing municipalities subject to multiple TMDLs that adopt a dedicated funding source to implement a SWMP designed to achieve reductions required by multiple TMDLs the option of selecting a single deadline for all TMDL reductions, as long as the latest specified TMDL implementation deadline is being met. This would have the effect of allowing Towns that adopt a dedicated funding source some additional time to meet some TMDL deadlines.

Section 2.2.1 Permittees are expected to annually report on what they are doing each year to control the pollutants identified in the applicable TMDL(s) and describe the basis for the Permittee's determination that such controls are adequate to meet the waste load reductions required by the TMDL(s). Since EPA has already determined what measures are necessary to meet the waste load allocations set forth in various TMDLs (e.g., the Long Island Sound, Shawsheen, Cape Cod, and Buzzards Bay TMDLs) , MassDEP believes that EPA should eliminate the requirement that Permittees describe the basis for the determination that the controls they are implementing are adequate.

Section 2.2.1(d) This section gives Permittees in the Blackstone River Watershed, Chicopee River Watershed, Chicopee Basin Lakes, Connecticut Basin Lakes, French River Watershed, Lake Boon and Millers Basin Lakes only seven years to implement the phosphorus control plan. Given logistical and financial constraints, we suggest that EPA consider providing initial pilot funding and expand timeframes to allow Towns sufficient time to plan, schedule and implement. MassDEP notes that Page 34 of the Fact Sheet states that EPA chose a shorter time frame than in the draft North Coastal MS4 Permit because scopes of work are smaller and that work should have commenced under the previous MS4 permit. MassDEP questions this reasoning. Given the lack of specificity in these TMDL

implementation plans, one could argue that the Permittees in these watersheds need more time than the North Coastal MS4 Permittees. Further, many of the Towns subject to these proposed requirements are smaller and have fewer resources for this complicated work.

This section also requires the Permittee to estimate the phosphorus load associated with each source. This section should define what is meant by a source of phosphorus loadings. EPA should provide additional guidance that clarifies its intent for the phosphorus control plan and identifying sources. Does EPA intend to include sources that discharge to a phosphorus impaired water only through the MS4 or does EPA intend to include sources that directly or indirectly discharge phosphorus to impaired waters? If only a portion of the municipality is covered by the MS4 Permit, does EPA intend to include sources of phosphorus in areas of the municipality that are not covered by the permit?

Section 2.2.1(e) This section requires that MS4 Permittees that discharge to the Long Island Sound Watershed evaluate sources of nitrogen which discharge from or through the MS4 to the Connecticut River Watershed, the Housatonic River Watershed and the Thames River Watershed. The MS4 Permit also requires that these MS4 Permittees implement practices to maintain and if possible reduce nitrogen loadings from or through the MS4 to the Connecticut River or its tributaries or the Housatonic River or its tributaries.

Page 35 of the proposed MS4 Fact Sheet identifies POTWS, septic systems, agriculture and atmospheric deposition as possible nonpoint sources of nitrogen. Page 35 of the proposed MS4 Fact Sheet also notes that the Long Island Sound TMDL has called for a 10% reduction in nitrogen loadings for urban and agricultural loads from out of basin sources. The Fact Sheet also notes that actions already taken by the treatment plants in Massachusetts and Connecticut are sufficient to meet this load reduction. In these circumstances, MassDEP believes that there is no need to require MS4 Permittees in the Long Island Sound Basin to evaluate sources of nitrogen. Moreover, Appendix G, Table G-2 identifies the specific public education and good housekeeping measures (e.g. reduction or elimination of fertilizers containing phosphorous and nitrogen, alternatives to detergents containing phosphates, septic system maintenance, proper management of grass clippings and yard waste, and parking lot sweeping) that should be implemented to meet the requirement that nitrogen loads do not increase. The text of the MS4 Permit should clarify that implementation of the public education and good housekeeping measures identified in Table G-2 is sufficient to meet the requirements of this section.

Section 2.2.1(f) A list is provided of municipalities that are subject to the approved TMDL for bacteria in the Shawsheen. Page 35 of the Fact Sheet indicates that possible sources are sewer connections to the storm drain, leaking sewers, sanitary sewer overflows, failing septic sources, deposits from waterfowl and livestock, and urban runoff. Appendix G, Table G-3 identifies illicit discharge detection and elimination together with public education and good housekeeping practices relating to pet waste management and water fowl control as the measures needed to address bacteria. The text of the MS4 Permit should clarify that implementation of the measures identified in Table G-3 is sufficient to meet this requirement.

Section 2.2.1(g) The MS4 Permit requires that Permittees identify and evaluate the sources of nitrogen that discharge to the Cape Cod Watershed and Buzzards Bay Watershed. However, page 36 of the Fact Sheet indicates that the nutrient TMDL does not identify the MS4s as a significant source of nitrogen, and that no waste load allocation was established for the MS4s. The MS4 Permit notes that

some Permittees in the Cape Cod Watershed are also subject to the Buzzards Bay Pathogen TMDL, and that sources of these pathogens include illicit discharges, boat discharges and failing septic systems. In addition, Appendix G, Table G-4 identifies the illicit discharge detection and elimination, public education and good housekeeping measures relating to pet waste management, water fowl control, and the proper management of landscaped areas as the stormwater control measures needed to meet the waste load allocations for nutrients and pathogens in the areas in and around Cape Cod and Buzzards Bay subject to pathogen and/or nutrient TMDLs. In these circumstances, MassDEP believes that EPA should eliminate the evaluation requirement and modify the text of the MS4 Permit to clarify that implementation of the measures referenced in Appendix G, Table G-4 is sufficient to meet the requirements of Section 2.2.1(g).

Section 2.2.1 (g) ii EPA ought to consider adding language that provides guidance for Towns regarding when the implementation of these practices should start.

2.2.2 Increased Discharges to Impaired Waters without an approved TMDL. This section requires Permittees to assess the potential for discharges from the MS4 to impaired waters to contribute the pollutant(s) of concerns and implement additional BMPs to address these discharges. Permittees need more information on what they are expected to do to meet this requirement.

2.3.1 Increased discharges to Impaired Waters With and Without TMDLs. This section requires Permittees to ensure that discharges do not cause or contribute to a water quality standard violation and instead result in a net decrease in pollutant loadings through enhanced BMPs or offsets. Permittees need more information on what they are expected to do to meet this requirement. For example, is there a minimum size for expansions i.e. that triggers this requirement?

Guidance is needed on the effectiveness of various BMPs to remove pollutants or to reduce the volume of the discharge similar to that already provided regarding Phosphorus reductions. Guidance is also needed regarding the use of offsets.

Section 2.3.3 – The provisions of this section specify that the State must review and certify that each new or increased discharge within the MS4 satisfies the anti-degradation provisions of the Massachusetts Surface Water Quality Standards. This requirement, as written, is neither practical nor reasonable for either the permittee or the Department. A literal interpretation of the requirement would result in any additional impervious area, from a single residential driveway or side walk to a mall parking lot, needing a local and state (or EPA) review. The staff resources necessary to comply with this provision would place an undue burden on the both municipality and the Department. It is the Department's understanding that this is one of the first NPDES MS4 permits nationwide to contain this requirement, therefore serious consideration regarding the process, implementation and impacts of this provision must be fully evaluated. The Department does not believe this has been done and the existing provision is inadequate. Prior to issuance of the final permit, the Department requests EPA provide clear and concise guidance on how EPA intends to satisfy this requirement. At a minimum EPA should provide options for states to narrow the universe of potentially affected projects, for example, through establishing realistic minimum thresholds triggering a review, presumptive compliance conditions or other mechanisms adequate to meet the intended degree of the environmental protection sought through this permit.

Section 2.4.2 Public Education. This requirement is unduly prescriptive and burdensome because it focuses on requiring each Town to take actions that are better taken on a regional or watershed scale. There has been extensive research on marketing stormwater messages to different audiences that has resulted in the development of key messages to be used to reach different audiences. EPA should consolidate that information so that Towns are not duplicating work already done in other areas of the country. Ideally EPA would provide these proven messages and sample materials and require Towns to participate in a regional or watershed Public Education program that would meet the intent of this section, including an evaluation component. MassDEP is concerned that requiring each Town to separately meet these laudable Public Education goals increases costs and reduces the effectiveness of these programs. EPA should also consider changing or eliminating the requirement for each Town to evaluate the effectiveness of the messages, and should consider eliminating the requirement that two messages be delivered to each of four audiences over the permit term.

This section requires specific messages for Permittees with MS4s that discharge to waterbodies with an approved TMDL. EPA should develop and provide those messages for use on a watershed or regional basis. EPA should play a critical leadership role in delivering common regional messages.

Section 2.4.6.4 Development. MassDEP commends EPA for both continuing the requirement for Towns to adopt rules for sites of 1 acre or more in size and for instituting a requirement that Towns adopt rules that meet Stormwater Management Standards 3 through 6 to sites with at least 2 acres of impervious surfaces. The use of impervious area as a metric is consistent with studies that indicate that increased impervious surface results in decreased water quality. Further, the selection of 2 acres as a size metric is appropriate as Towns develop and administer the wide range of new MS4 permit requirements. MassDEP also is prepared to provide guidance for how these Standards should be applied based upon our 15 year-long experience implementing the Massachusetts Stormwater Standards.

MassDEP commends EPA for encouraging the implementation of BMPs that capture the runoff from the one inch storm event. EPA may want to add a similar suggestion in Sections 2.2.1 and Sections 2.2.2 with regard to discharges to impaired waters with and without TMDLs. Further, EPA ought to consider providing specific incentives and/or relief from specific program requirements for Towns that adopt the 1 inch standard in urbanized areas or for the entire Town, with permit relief greater for a Town that adopts the 1 inch standard town-wide. The long term environmental benefits from use of the 1 inch standard town-wide justify providing significant regulatory relief. EPA ought to consider coupling this relief for a Town that also adopt a dedicated funding source for its stormwater program. Examples of relief ought to be drawn from comments Towns make regarding what they perceive as particularly burdensome permit requirements.

Section 2.4.6.4(b) Redevelopment. For pre-existing impervious surfaces, EPA ought to consider adding MassDEP's existing redevelopment requirement that proponents also improve existing conditions in addition to meeting the various listed Standards. MassDEP also is prepared to provide guidance for how Standard 7 should be applied based upon our 15 year-long experience implementing the Massachusetts Stormwater Standards.

Section 2.4.6.4(c) EPA ought to rewrite this part to clarify its intent. It's not clear whether EPA intends this part to apply to redevelopment projects with less than 2 acres of impervious surface, redevelopment projects outside wetlands jurisdictional areas, or some other class of project.

Section 2.4.6.5 This section requires procedures for new development and redevelopment that will prevent or minimize impacts to water quality. This requirement is too vague as written, arguably is already being met, and leaves unclear what Towns must do to meet this requirement. Guidance is needed on what Permittees are expected to do to fulfill this requirement.

Section 2.4.6.6 MassDEP commends EPA for including annual certifications as one method that may be used to ensure long term operation and maintenance of structural stormwater BMPs.

Section 2.4.6.9(c) Mass DEP commends EPA for including Outstanding Resource Waters and cold water fisheries to the list of critical receiving waters

2.4.7.2 MassDEP commends EPA for adding the references to MassDEP's Policy on Storage of Deicing Chemicals

3.0 Outfall Monitoring Program. Monitoring should be required only if it is necessary to identify illicit discharges or to assess the effectiveness of the Permittee's stormwater management program. To avoid imposing unnecessary expenses on MS4 Permittees, the MS4 Permit should make sure that any monitoring required under the Permit relates to these purposes. MassDEP commends EPA for reducing the parameters that must be monitored and for allowing the Permittee to develop a plan that reduces the number of outfalls that have to be monitored.

MassDEP would like EPA to include additional conditions that may be relied on to reduce the monitoring requirement. For example it is highly unlikely that there are illicit discharges to the MS4 system in areas that are not served by sewers. It is therefore unnecessary to require MS4 Permittees to perform wet weather monitoring in areas not served by a POTW. Wet weather monitoring should be required where surface waters are impaired to assess the effectiveness of the actions taken under the permit to address the impairments. Where a water body is not impaired, there is no reason to require wet weather monitoring.

Comments on the Interstate, Merrimack and South Coastal Watersheds Fact Sheet

Page 19 MassDEP commends EPA for including information regarding how the 2010 census will be used.

Page 25 The MS4 Permit requires that the Stormwater Management Plan be available to any member of the public on request. The MS4 Permit should also require – not encourage – Permittees to make it available at a public location such as the library, town/city hall, or posted on the town's website.

Page 36 The Fact Sheet indicates that offsets must assure a greater than one to one decrease in pollutant loads to the water body. EPA ought to consider offsets that are consistent with EPA policy must also achieve the greater reduction.

Page 41 EPA ought to review the anti-degradation requirements in the Fact Sheet to ensure that they are consistent with the anti-degradation requirements listed in the permit.

Page 61 EPA ought to state clearly that it intends Towns to meet the proposed requirements that apply to properties with 2 acres or more of impervious surface in addition to retaining the 2003 requirement that applies to properties of 1 acre or more in size.

Page 61 The MassDEP Stormwater Management Standard omitted from the post-construction program for development and redevelopment is peak rate attenuation. The reason for that omission is that peak rate attenuation is aimed at flood control not water quality.

Page 66 MassDEP commends EPA for including information regarding UIC requirements. MassDEP's UIC contact is Joseph Cerutti at 617-292-5859.

Page 68 Wet weather monitoring should not be required if the area is not served by a POTW. Wet weather monitoring should not be required if the outfall discharges to a water that is not impaired by stormwater.
