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March 11, 2011

EPA-Region 1  
Attn: [Kate Renahan](#)  
Office of the Regional Administrator  
5 Post Office Square – Suite 100  
Mail Code: ORA01-1  
Boston, Massachusetts, 02109-3912

Re: Comments on the Draft Massachusetts Interstate Merrimack South Coastal Small MS4 General Permit

Dear Ms. Renahan:

Woodard & Curran has prepared the following comments and questions, referenced by page (from EPA website copy of the draft permit) and by the permit section number.

(pg. 4, Part 1.2.1): W&C recommends EPA provide further guidance on the ramifications of the revised/expanded urbanized areas that will be defined due to the 2010 Census. The draft permit currently references the urbanized areas determined by the 2000 Census. If the Census Bureau releases the 2010 urbanized areas before the final permit is issued, will the permit and Appendix C be revised to include those new urbanized areas? If the 2010 urbanized areas are released after the final permit is issued, will entities included in the new urbanized areas be required to apply for coverage under the permit? If a permittee's urbanized area is expanded by the 2010 Census, and there is a MS4 within the expanded area, will the permittee be required to modify its stormwater management program mid-permit term to include the expanded urbanized area?

(pg. 6, Part 1.3.m): How does a permittee determine or show that its stormwater discharges do or do not cause or contribute to an instream exceedance of a water quality standard? W&C recommends EPA provide additional guidance on this permit requirement.

(pg. 6, Part 1.3 l): Does this mean that any increased discharges, as later defined in the permit as "a discharge of stormwater from the MS4 that commences after the effective date of the permit and is the result of the creation of one or more acres of new impervious area" to waters designated as tier 3 for antidegradation purposes (such as Outstanding Resource Waters (Class A waterbodies, etc.)) are not covered by the permit, and therefore a permittee would be required to apply for an individual permit to cover that increased discharge? If this is the case, W&C believes EPA will be inundated by individual permit applications. To be consistent with the MassDEP "Implementation Procedures for the Antidegradation Provisions of the Massachusetts Surface Water Quality Standards", W&C recommends EPA modify this Part to include the disclaimer "unless they receive the highest and best practical method of treatment" Is Part 1.3 l consistent with Part 2.3.3 Antidegradation?

(pg. 6, Part 1.3 m): The phrase "highest and best practical method of treatment" is not defined in the permit nor is it defined in Attachment A - Definitions, Abbreviations and Acronyms, nor is it clarified in the fact sheet. How many tier 3 waters are there, and what does EPA define as the highest and best practical method of treatment? This appears to be a term defined by the MassDEP as part of its antidegradation provisions of the state water quality standards. W&C recommends EPA revise this provision to say "...unless they receive the highest and best practical method of treatment as defined by MassDEP."



(pg. 6, Part 1.4): The phrase “significant contributor of pollutants” is not defined in the permit nor is it defined in Attachment A - Definitions, Abbreviations and Acronyms, nor is it further explained in the fact sheet. Will EPA please define or clarify this phrase?

(pg. 7, Part 1.7.1): Will permittees receive written authorization from EPA and MassDEP as one letter, or should permittees expect two separate correspondences?

(pg. 8, Part 1.7.4): How long does EPA expect it will take between the effective date of the permit until all permittees are authorized to discharge? W&C expects it could take six (6) months to one (1) year for EPA to receive NOIs from all permittees, public notice the NOIs, receive comments, and respond to significant comments, and then authorize the permittees to discharge. The compliance schedules in the permit are generally front-ended – most of the work required by the permit occurs in the first two years. For these reasons, W&C recommends EPA add a minimum of one (1) year for compliance timeframes to the majority of the permit provisions, such as system mapping (Part 2.4.4.6), modification of the ordinance or other regulatory mechanism (Part 2.4.6.4), etc.

(pg. 11, Part 1.10.a.): In light of the numerous new and expanded requirements included in the draft permit, we suggest EPA revise the permit to allow permittees a minimum of six (6) months to complete development of a written Stormwater Management Program.

(pg. 11, Part 1.10.b): This section requires permittees to modify or update their existing BMPs and measurable goals to meet the terms and conditions of the new permit. Does that mean that permittees can not delete ineffective or impractical BMPs from the Stormwater Management Program developed under the MS4-2003 as part of developing the new program?

(pg. 12, Part 1.10.2): The SWMP requires permittees to list any impairments of their receiving waters. Permittees will likely use the “305(b)/303(d) maps” and the “305(b)/303(d) stats” provided by EPA on their website <http://www.epa.gov/ne/npdes/stormwater/ma.html>. These maps and stats are based on the 2008 Massachusetts Integrated List of Waters and do not reflect the changes proposed in the 2010 draft Massachusetts Integrated List. We recommend EPA revise these figures to reflect the 2010 list, once it is finalized. W&C also noticed that, on the maps, waterbodies that have approved Final TMDLs for some impairments, but also have other impairments not yet covered by a TMDL, are displayed as a “Category 5” water instead of a “Category 4(a)” water. For example, the Town of Bedford’s map shows the Shawsheen River as a Category 5 water, when there is also a final TMDL that covers pathogens. This is confusing; W&C recommends EPA clarify this fact on the maps.

(pg. 12, Part 1.10.2): “Documentation of compliance” with outfall monitoring and the drinking water/groundwater recharge elements will be completed during the term of the permit so the MS4 cannot indicate its “compliance” with this element in its initial written SWMP. We suggest EPA clarify that the SWMP should be appended (perhaps annually) to document compliance with these and other ongoing requirements.

(pg. 12, Part 2.1.1.a.): How does EPA define “contribute to an exceedance of applicable water quality standards”? For example, if a permittee is conducting wet weather monitoring at an outfall that discharges into a waterbody that is impaired (included on the state’s 303(d) list) for pathogens, and analytical results show that e.coli is detected in the sample above detection limits, would EPA consider this discharge as “contributing” to an exceedance of applicable water quality standards?

(pg. 12, Part 2.1.1.a.): The discharges will be “presumed to meet water quality standards once the permittee fully satisfies the conditions of the permit; does this imply protection against 3rd party legal



action on the permit and the MS4? What about the period when the permittee is working towards satisfying conditions of the permit – are they liable to be sued?

(pg. 13, Part 2.2.1.a.): If a TMDL is approved after the effective date of the permit, meeting the requirements of the TMDL will not be a requirement of this permit; please verify that this is the case.

(pg. 17, Part 2.3.2.1): If a "new discharge" demonstrates a reduction in load for a pollutant with a pending (but not completed TMDL), why can coverage not be granted under the general permit? It seems to be penalizing a new discharge by something not in the permittee's control (i.e. TMDL not yet completed by MassDEP and/or EPA)

(pg. 21, Part 2.4.2.2): Would EPA please provide examples of ways EPA recommends permittees evaluate the effectiveness of education messages and the overall education program?

(pg. 26, Part 2.4.4.7.d): The permit states that if an outfall inventory consistent with the requirements of this part was completed under the MS4-2003, the permittee is to document that information as part of the SWMP and annual reports. Does this mean that the permittee is exempt from re-doing all the requirements of the outfall inventory? For example, if a permittee recorded dimensions, shape, material, spatial location, and physical condition, as well as sensory operations, under the MS4-2003, but did label the outfall with a unique field identifier as part of the effort, would the permittee only be required to go back to put identifiers on the outfalls? W&C recommends EPA revise this requirement to state that, if the permittee conducted any elements of the Outfall Inventory under the MS4-2003, they shall document the information as part of the SWMP and annual reports and are exempt from re-doing those elements of the Outfall Inventory.

(pg. 26-29, Part 2.4.4.8.c.): We question why every catchment area needs detailed investigation; we suggest limiting the evaluation to the "high" potential for illicit discharge areas; this would be a more focused and more cost effective approach. We also question why it is necessary to "partially dam" junction manholes which are observed as having no evidence of dry weather flows – this is not a cost effective approach. We suggest that if there is no evidence of dry weather discharge at an outfall, the permittee should not be required to investigate the upstream drainage system for illicit discharges.

(pg. 29, Part 2.4.4.8.v): This permit section requires permittees to include an inventory of all problem catchments in the year 1 annual report. Permittees can not delineate catchments until system mapping is complete, and all catch basins and other inlet structures are identified, and direction of stormwater flow is determined. Given that mapping isn't required to be completed until two years from the effective date of the permit, W&C recommends EPA extend this timeframe by at least one year to allow permittees ample time to complete mapping and delineate catchments.

(pp. 33-34, Parts 2.4.6.4.a and b): EPA has revised the post-construction stormwater management threshold for local regulations to be less stringent than the MS4-2003 (i.e. "For new development projects that disturb one or more acres **and** upon completion results in two or more acres of impervious surfaces.) Is this consistent with the Clean Water Act's Antidegradation Provisions? This is confusing for permittees that have already adopted their local stormwater ordinances per the requirements of the MS4-2003. In most cases these local Bylaws and Ordinances apply all ten of the MA Stormwater Management Standards to the maximum extent practicable to projects meeting the MS4-2003 threshold (i.e., projects that disturb one acre or more and projects disturbing less than one acre if the project is part of a larger common plan of development or redevelopment which disturbs greater than one acre) regardless of the proximity to resource areas under the MA Wetlands Protection Act and regardless of the total impervious cover.



(pp. 35-36, Part 2.4.6.7): W&C recommends EPA revise the compliance timelines for this provision by one (1) year to match the compliance timeframe in Part 2.4.6.8. Review of local code (regulations) is time consuming and takes substantial effort, and therefore it is most efficient to review local code only once during the permit term. W&C recommends requirements relating to review of local code (regulations) be on the same compliance schedule.

(pg. 36, Part 2.4.6.9.b.): Due to the difficulties of tracking changes in impervious cover over a short time period (i.e. one year), we suggest the assessment be done only in the first and last years of the permit term.

(pg. 36, Part 2.4.6.9 a): Specifically which sub-basins at <http://www.mass.gov/mgis/> does EPA recommend using? Also, the sub-basins recommended in this part do not match the sub-basins used by EPA to develop the IA and DCIA statistics (the "Massachusetts Nested Subbasins" presented in "Local and Cumulative Impervious Cover of Massachusetts Stream Basins," U.S. Geological Survey Data Series 451, developed by Sara L. Brandt and Peter A. Steeves) as described <http://www.epa.gov/ne/npdes/stormwater/ma/IA-DCIA-Calculation-Methodology.pdf> W&C recommends EPA select one sub-basin to recommend for this part of the permit.

(pg. 37, Part 2.4.6.9 b): This is another requirement that depends on a permittee completing mapping of its MS4. At a minimum, W&C recommends adding one (1) year to this timeframe for compliance.

(pp. 37-45, Part 2.4.7): W&C recommends EPA add one (1) year to the timeframe for compliance with all elements of the O&M programs and development and implementation of SWPPPs. Permittees may not yet be authorized for coverage under the permit, and also will be doing activities to meet numerous other permit requirements. Allowing one additional year for these activities will provide permittees the proper time to meet more critical permit conditions, such as develop their SWMPs, map their systems, and work on delineation of drainage catchments for IDDE.

(pg. 39, Part 2.4.7.1.d): Because most communities have not surveyed or measured the distance to the bottom of each catch basin sump, it will be difficult to know when a sump is "50 percent full." Consider using an easily measurable benchmark, such as 2 feet below the invert of the outlet pipe, as an alternative when total sump depth is unknown.

(pg. 41, Part 2.4.7.2): We suggest that only one supplemental Stormwater Pollution Prevention Plan (SWPPP) for all municipal operations be acceptable and not one for each individual facility; also, the "management practices" should only be those germane to the operations at the facility.

(pg. 45, Part 3.1.4): The permittee is required to "implement" the plan within five (5) years – is it required to complete it within five (5) years or just begin/implement it? Does the permittee need to submit this plan to EPA for approval?

(pg. 45, Part 3.1.4): Development of a permittee-specific monitoring plan is another requirement that depends on completion or substantial progress on mapping. At a minimum, W&C recommends adding one (1) year to this timeframe for compliance.

(pg. 45, Part 3.1): W&C recommends EPA add dry weather and add more wet weather analytical monitoring "outs" associated with a permittee-specific monitoring plan, such as:

- If the permittee conducted dry weather screening and analytical monitoring under the MS4-2003 that was consist with Part 3.2 of the draft permit; or



- If a catchment is served by a BMP that captures the 1 inch (90<sup>th</sup> percentile) storm.

(pg. 46, Part 3.1.4.4): Could EPA define “forest land use”? Does forest land use include open space? Why not add open space and/or open land to this provision?

(pg. 47, Part 3.3.3): During wet weather, we suggest that the MS4 be allowed to analyze only for bacteria, total suspended solids and any "TMDL" parameter or pollutant contributing to an impairment for which reduction is required; other parameters listed are unusual on the 303(d) list, have limited if any value in helping identify and solving wet weather problems and are a significant cost.

(pg. 47, Part 3.3): What is EPA really looking for permittees to accomplish through wet weather monitoring? Would EPA provide further explanation for the need to monitor during wet weather?

(pg. 49, Part 5.3.1): The permit provides only one (1) month to compile information, complete the annual report and submit the report to EPA and MassDEP. For municipalities, development of the annual report typically requires coordination between numerous departments and boards, and often with non-profits and watershed groups. Even in communities with excellent record keeping, it typically takes up to a month to collect information and input the information into the annual report. Annual Report preparation requires review by appropriate officials, as well. Compared to the 2003 general permit, this draft permit has substantially increased record keeping and annual reporting requirements. In light of the increased reporting requirements and the substantial coordination and review efforts, we suggest EPA strongly consider providing three (3) months to submit the annual report.

(pg. 49, Part 5.3.1): We also suggest the first year annual report cover any partial year under the permit prior to the first July 1 date as well as the first full year (July 1- June 30); this will eliminate submittal of an annual report for only a portion of a year. This should also take into account any remaining time from the previous (2003) permit (e.g. MS4 should not be required to submit a report for a period less than one full year).

Appendices: The Draft Massachusetts North Coastal Small MS4 General Permit included an Appendix I – Field Measurements, Benchmarks, and Instrumentation, which is extremely helpful in identifying likely sources of illicit discharges. The North Coastal Small MS4 General Permit referenced this Appendix for use by permittees within the Charles River Watershed only for junction manhole monitoring. However, the information included in this appendix is applicable to all permittees conducting illicit discharge detection and elimination activities. W&C recommends EPA include this appendix in the final permit, or at a minimum, reference the Center for Watershed Protection’s “Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments” as a reference for conducting illicit discharge work.

We thank you for the opportunity to comment on the draft Massachusetts Interstate Merrimack South Coastal Small MS4 General Permit.

Respectfully,

WOODARD & CURRAN INC.

A handwritten signature in blue ink that reads "Emily Scerbo".

Emily Scerbo, P.E.  
Project Engineer