CITY OF CAMBRIDGE • EXECUTIVE DEPARTMENT

Robert W. Healy, City Manager *Richard C. Rossi, Deputy City Manager*

March 31, 2010

Environmental Protection Agency – Region 1
ATTN: Thelma Murphy
Office of Ecosystem Protection
5 Post Office Square, Suite 100
Mail Code: OEP06-4
Boston, MA 02109-3912

RE: Draft North Coastal Small MS4 General Permit

Dear Ms. Murphy:

The City of Cambridge wants to thank you for allowing us to provide comments on the above reference draft Stormwater General Permit for the North Coastal area, of which the City of Cambridge is a part. Cambridge is presently covered under the 2003 NPDES MS4 general permit for Phase II communities and is also covered in part by the Total Daily Maximum Load (TMDL) for phosphorous and bacteria for the lower Charles River basin.

Our comments are grouped into the following broad categories:

Requirements to Meet Water Quality Standards

The City of Cambridge is served primarily by combined sewer systems both in the Charles River Watershed and in the Mystic River Watershed. Over the past 20 +/- years the city has developed a capital infrastructure program aimed at reducing localized flooding, reducing/eliminating combined sewer overflows, ensuring appropriate levels of service for sanitary sewers and storm drains, and improving overall water quality. One of our major approaches to infrastructure maintenance and reconstruction has been to design and implement phased sewer separation and stormwater management programs. We believe our approach is consistent with the water quality goals of the Clean Water Act and the regulatory objectives of this draft general permit. We are however, concerned with the ambiguity within the permit specific to "New Dischargers", "Increased Discharges", and "Antidegradation" and how these apply to newly separated stormwater from sewer separation projects. If newly separated stormwater catchments are considered as a new or increased discharge, then the ability of a dense urban environment like Cambridge to comply with the antidegradation requirements will severely hamper or eliminate our ability to continue with our current sewer separation program. EPA should clarify these terms and ensure that they do not penalize or make impractical continued sewer separation programs in highly urbanized areas.

Furthermore, the area identified in Cambridge as separate and draining to the Charles River as defined in Appendix G, Table G-2 (640.42ha) has an associated TMDL loading of 221.09 kg/yr. This includes areas that drain to both Department of Conservation and Recreation (DCR) owned outfalls and City of Cambridge owned outfalls. Thus the TMDL loading must be further subdivided to determine the City's Waste Load Allocation (WLA). This continues to frustrate our understanding of how further sewer separation is to be treated under these conditions. Should our waste load allocation (WLA) increase if sewer separation is to be implemented, or will 100% of the additional load associated with the newly separated areas have to be mitigated through offsets and BMPs?

Illicit Discharge Detection and Elimination (IDDE) Program

2.4.4.1 EPA should clarify under what size/duration storm event that SSO reporting and remediation is required. It is important to note that even within areas of the City where systems are separated, being dependent on the Massachusetts Water Resources Authority (MWRA) interceptor systems that convey other community flows as well as combined sewer flows is causative of elevated hydraulic grade lines during severe storm events, thus it is of importance that the SSO remediation standard be associated with storms of certain size and durations.

2.4.4.8 (d) (vi) (7) Work Progression and Schedule: The requirement to complete investigations of 100% of MS4 catchments using the IDDE approach in unrealistic and very labor intensive, especially if weather conditions or identification of illicit connections delays progress. Consideration should be given to extending this requirement into the next permit term.

Good Housekeeping & Pollution Prevention

2.4.7.1 (d) (iii) Infrastructure Operations and Maintenance - optimize routine cleaning and maintenance of catch basins: The requirement to inspect, record and track the inspected sediment load of sumped catch basins is inconsistent with efficient operations for catch basin maintenance. Currently our catch basins within the municipal right of way are cleaned according to our street sweeping route to ensure that no cars are parked over catch basins. The effort to inspect the depth of debris is an extra step that is inefficient, extremely costly and is questionable from the perspective of added value, in an already labor intensive activity. The additional requirement to report the volume of material removed from each catchment is also inconsistent with these established cleaning routes. Currently Cambridge reports the total number of catch basins cleaned and the tons of debris removed. Requiring that these parameters are further defined by catchments only adds to the cost of an already expensive program and does not provide useful data. Prioritization of catch basins inspections near active construction sites is also inefficient and should be more appropriately addressed through appropriate erosion control measures during construction, such as additional street sweeping, aggregate stabilized construction entrances, silt sack inserts for catch basins, etc. Finally, EPA does not specify what an appropriate sump depth for a catch basin should be. It has been the practice of the City of Cambridge over the past twelve (12) years to upgrade our catch basins to 6 foot sumped structures throughout the city, providing the sump with significant storage and reducing the

possibility of resuspension. Thus, the standard for deep sumped catch basins and shallow catch basins should be different.

2.4.7.1. (d) (iv) The requirement to clean all municipal sidewalks twice per year is excessive. Currently sweeping programs that target cleaning sidewalks within commercial areas are more focused and provide a better return on effort. Much of the city sidewalk infrastructure is less than six feet in width, thus sweeping of such would require manual labor as distinct to mechanized equipment. Residential sidewalks are usually maintained by adjacent property owners and require little additional maintenance. It should also be noted that sidewalks in the City drain to the gutter line and thus the majority of the debris associated with such is collected during our monthly street sweeping effort. Such being the case, it seems impractical, and highly inefficient to demand that sidewalks be cleaned twice per year.

Outfall Monitoring Program

3.3.1 The requirement to sample all outfalls during wet weather conditions is of significant concern to the City. There is no guidance provided specific to the appropriate conditions necessary for such system sampling. We are concerned as to what the appropriate antecedent conditions, duration of storm event, parameter capture should be etc. If such parameters are not properly specified then the value of this effort is greatly undermined. Selected wet weather samples taken during a well defined storm event could produce valuable data if orchestrated across the watershed.

General Concerns/Comments:

- The guidance for addressing the phosphorous TMDL is limited and requires significant expansion. Clearly defined and consistent parameters for calculating phosphorus reduction associated with particular BMPs should be developed with detailed information on how to relate BMP implementation to removal percentages. BMPs that are not dependent on infiltration need to be better understood, especially for highly urbanized areas where infiltration is not achievable due to high ground water and poor soil conditions. In addition, in areas where BMP installation may be infeasible, trading mechanisms and offsets are identified as viable solutions for phosphorous reduction. It is unclear and of concern as to what such a mechanism will mean for densely populated urban areas in the long term.

- EPA and MassDEP should sponsor workshops and "how to" sessions for municipalities assisting them with the development of the required assessments and plans required in this general permit such as the Phosphorous Control Plan, Stormwater Management Plan, and the Notice of Intent well in advance of permit deadlines.

- Overall the permit schedule is very rigid and tight for the many investigations, documentations, plans, and assessments that are required under this permit. Many of these are achievable individually, but when taken together are unrealistic and almost impossible to meet. Consideration should be given to allowing more flexibility in the schedule.

In summary, we recognize the considerable effort and detail EPA has taken in crafting this draft general permit. Cambridge has taken and will continue to take great strides to address water quality problems in both of our watersheds, Charles River and Mystic River. We respectfully request that EPA consider our request for clarification and modification of the above mentioned program elements when finalizing the North Coastal Small MS4 General Permit.

We would welcome an opportunity to discuss in more detail our concerns and questions related to water quality attainment and antidegredation criteria as it may apply to our ongoing sewer separation program, especially for waters with an established TMDL and waters listed as impaired. This is a time sensitive concern for us as we are currently moving forward on several large projects that represent significant capital investment and time. We will contact your office in early April with hopes to schedule a meeting with you and our Department of Public Works to review this particular concern.

Sincerely,

Robert W. Healy
City Manager