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January 13, 2011

Ms. Kate Renahan  
Office of Regional Administrator  
5 Post Office Square, Suite 100  
Mail Code: ORA01-1  
Boston, MA 02109-3912

**Subject: Draft NPDES General Permit for Discharges from MS4s in Merrimack Region Massachusetts**

Dear Ms. Renahan,

The Town of Dracut, Massachusetts is devoted to improving water quality by reducing the negative impacts of stormwater runoff. Dracut works to meet its stormwater goals and obligations with limited funds and limited staff. It is vital to get the most out of every dollar expended and in manpower deployed in bringing valued services, including environmental protection, to our residents. To accomplish these objectives we look to use the most cost effective means for delivering our services. It is with this mindset that we reviewed the DRAFT Merrimack Watershed Permit.

The EPA DRAFT proposes a number of requirements that cause us concern based upon our available staffing, staff expertise, funding, funding priorities, and the value of the results expected versus the cost to implement. Most of the comments below were taken directly from MassDOT's review of proposed changes to MS4 permits. Considering that MassDOT will not be subject to the Merrimack NPDES permit and that like Dracut has a roadway system that comprises the majority of their storm water management network, liberty was taken to make certain that points made in their review that are relevant to our situation be reiterated.

Dracut's lack of sufficient staff needed to fulfill the permit requirements would result in costs incurred for the use of consultants. Also, this lack of sufficient staff and specialized expertise will certainly result in our not fully foreseeing difficulties that will be encountered in attempting to comply with the expanded demands proposed in the DRAFT.

The Town's need to succeed in providing our current level of service results in many town employees doing multiple jobs and by management being vigilant in prioritizing what must be done. The proposed expansion of stormwater permit requirements by the federal government without the corresponding resources to accomplish said requirements represents unfunded mandates. Local governments, such as Dracut's, are truly struggling to keep current levels of service for public safety, education, sanitation, health, etc.

We ask that our comments/concerns be taken into consideration prior to finalizing the Draft NPDES permit for our region. This letter outlines Dracut's *identified* concerns and also offers some alternative recommendations.

Comments:

*The Dracut storm water system is unlikely to have significant numbers of illicit connections.* The availability of municipal sewer is a relatively recent convenience for Dracut residents. Before each connection to municipal sewer is approved, a thorough inspection is conducted of the premises to ensure that no illicit connections exist. Therefore, illicit discharge detection and elimination efforts are unlikely to produce improvements in water quality that justify the very high costs of implementing these investigative measures system wide (see below for further discussion).

Dracut operates 163 miles of roadways. As a result, activities that require access to storm water features including monitoring, maintenance, and inspection can result in significant disruptions in traffic flow. In addition, the traffic levels can cause significant safety concerns for staff performing these activities. The Department of Public Works man hours required will be increased. These activities are more time consuming, expensive, disruptive, and carry more risk for maintenance workers. Also, if police details are required for both safety and contract reasons then the additional costs will be burdensome.

Funding storm water projects is more challenging for Dracut. Municipalities that have the potential to develop storm water utilities as a means to provide funds for storm water improvement projects have a significant advantage. Dracut has no such authority and it is difficult to imagine that the taxpayers will vote to grant the authority to create a municipal stormwater utility.

*The Dry Weather Monitoring and Illicit Discharge Requirements are not Appropriate for Dracut*

Dracut has developed and implemented a program to remove illicit discharges to the MS4. The plan was developed during the first year of the 2003 permit term. The plan was implemented and maintained during the remainder of the permit term. Over a 3 year period Dracut performed dry weather screening on each and every outfall. Testing was followed by prioritization based upon both the highest readings of contaminants and upon the imminent availability of municipal sewer. In-pipe television inspection and follow-up sample collecting was performed on these high priority outfalls. These follow-up sample results of dry weather flows identified during this inventory indicated that the quality of these flows were likely caused by infiltration, and therefore not due to an illicit discharge. Therefore, despite this significant undertaking, Dracut identified no illicit discharges.

We have experienced that implementation of the dry weather monitoring requirement is very expensive and leads to minimal water quality benefits. The draft permit contains a number of elements that would substantially increase this cost. Based on the results of previous IDDE efforts performed by Dracut, this effort and expense is unlikely to lead to substantial improvements in water quality.

In the past, most illicit discharges have been found by Dracut's Department of Public Works maintenance personnel. Therefore, continuing to review mile after mile of drainage systems that are unlikely to have illicit discharges is an inefficient use of taxpayer funds. Instead please consider an increased focus on further training and education of Dracut staff and contractors and direct action to remove any identified discharges as an efficient means of detection and elimination.

The many screening factors for ranking catchment areas as part of the illicit discharge work will be difficult for Dracut to develop and are not available in GIS. Dracut supports the concept of prioritizing areas for IDDE efforts. However, the prioritization approach should be flexible and incorporate field experience, observations from maintenance crews, and land uses.

Particularly troublesome is the requirement in the draft permit to evaluate the potential for intermittent dry weather flows in junction manholes by damming the inlets and then re-inspecting. This effort would require confined space entry, specially trained personnel and equipment, and traffic control measures with the potential to cause significant traffic impacts in many locations. As a result, the cost per manhole inspected in this manner would be prohibitive.

Another concern is the requirement to test for *E. coli* or enterococcus. Testing for *E. coli* or enterococcus cannot be performed in the field and instead must be brought to a lab for analysis. Bacteria samples have restrictive holding times (6 hours) which significantly limit the field work performed each day in order to get the samples back to the lab or require additional personnel on the field crews to bring samples to the lab mid-day. Testing for *E. coli* or enterococcus should only be required where initial desktop screening has indicated a likelihood of sewer breaks or interconnections.

*The Wet- Weather Monitoring Requirements Would be Very Costly and Not Result in Meaningful Information*

The draft permit contains extensive wet weather monitoring requirements that would be extremely costly for Dracut to implement. Dracut has seen an estimate that the costs of conducting wet weather sampling, including analytical costs, labor, and traffic control costs, would be more than \$100 per outfall; with the total costs for sampling all 429 outfalls in Dracut exceeding \$43,000.

If EPA includes a monitoring requirement, the purpose of the monitoring should be clearly stated and the requirements should be designed to achieve meaningful results in a cost-effective manner.

*The Requirement to List the Number of Outfalls that Contribute to Each Water Body in the NOI Should be Removed*

Due to the limited number of staff and staff expertise, the draft permit requirement to list the number of outfalls that contribute to each water body would be infeasible for Dracut to meet within 90 days. We have not prepared watershed delineations to each individual Dracut water body that was included in the MA DEP 303d list. Without individual watershed mapping to each section of stream or water body available in GIS, this task will require significant effort and time. Therefore, it would not be feasible to determine the number of outfalls that drain to each individual impaired water body within 90 days.

Furthermore, this effort would be costly and may provide no discernable water quality benefit. It is requested that as drainage infrastructure mapping is completed, Dracut will identify the individual receiving water and watershed associated with the drainage system. This would be the appropriate time to update a list of outfalls to receiving waters.

*The Requirements for Dracut to comply with the Total Maximum Daily Loads (TMDLs) in the Merrimack Watershed are Unclear.*

It appears vague as to what Dracut must demonstrate to be in compliance with TMDLs under the draft permit. Specifically, it does not appear defined as to what waste load allocation applies to Dracut or how to assess compliance with a specific waste load allocation (WLA).

Dracut recommends that the assessment be based upon the implementation of TMDL recommendations rather than a quantitative assessment of pollutant loading. This would avoid expensive pollutant loading modeling. This approach would allow permittees to take credit for BMPs that achieve reductions in the pollutant of concern, including those that have been in place historically. Otherwise permittees that have voluntarily implemented BMPs previously will be penalized by being required to demonstrate additional reductions.

*The Permit Should not Require Implementing Structural BMPs as Stand Alone Projects*

The permit requires the implementation of BMPs to achieve the WLA and ensure that discharges do not cause or contribute to water quality impairments. The flexibility this allows permittees is important to Dracut because retrofitting storm water systems with structural BMPs as standalone projects is not a cost-effective means of controlling storm water. Instead, BMPs should be installed during reconstruction and repair projects, which occur on an ongoing basis within Dracut. Combining reconstruction and BMP installation activities substantially reduces costs for mobilization, excavation, and traffic control. During reconstruction there are frequently fewer constraints on BMP installation because there is a larger area disturbed. Finally, combining the construction efforts associated with BMP implementation and construction may minimize impacts to water quality associated with construction runoff, which is known to be a significant contributor of sediment loading.

Therefore, Dracut believes that EPA should confirm that the implementation of structural BMPs can occur on a schedule that allows them to be implemented during construction and repair projects and not as standalone projects.

*The Permit has a Number of Mapping Requirements that are Unwarranted and Would be Infeasible for Dracut.*

The permit requirement to map the entire MS4, including all catch basins, interconnections with other MS4s and treatment structures within the first 2 years of the permit should minimally be extended. In addition, it would be an expensive undertaking if implemented. If this permit condition is retained, Dracut will require a longer timeline to complete the mapping. Perhaps a reasonable compromise would be for Dracut to commit to mapping 25% of TMDL watersheds each year. It is suggested that would be a reasonable, results based commitment that focuses on water bodies with documented water quality impacts.

The permit requirement to delineate catchment areas would be very costly to implement for Dracut.

In summary, the mapping requirements would be very expensive to implement. Instead of requiring comprehensive mapping of the storm water system all at once, EPA should allow permittees the flexibility to efficiently conduct the mapping required to meet the permit's water quality goals. This could include conducting phased mapping when new BMPs are designed or installed and when reconstruction occurs. This would be much less costly and have similar utility. Additional mapping could focus on TMDL watersheds where storm water has been identified as a source of the impairment and mapping to aid in identifying BMP solutions.

*Schedule and Need for Storm Water Pollution Prevention Plans:*

Developing SWPPPs for all Dracut maintenance facilities would be an enormous undertaking. This would be a severe challenge to complete within 2 years, as required by the draft permit. During the last permit term, EPA determined that SWPPPs were not necessary. It is not clear why this determination has changed. Dracut believes this requirement should be removed, or at a minimum the compliance timeline extended.

*Street Sweeping and Catch Basin Cleaning Inspections and Tracking are Infeasible and Unnecessary*

The requirement to develop a program to repair and rehabilitate MS4 infrastructure is another paperwork task that may be unrealistic for Dracut unless spread across a long period of time. DPW staff is responsible for maintenance budgets, which include repair and rehabilitation of drainage infrastructure not part of individual construction projects.

Dracut subcontracts catch basin cleaning to private contractors. In order to document the depth of accumulated sediments at each catch basin, a Dracut employee would have to ride with each catch basin cleaning crew. The length of time spent at each basin would increase significantly thereby slowing down the cleaning to allow the employee to perform and document the measurement before cleaning the catch basin. This would result in a significant increase in costs. Dracut plans its catch basin cleaning contracts based on historic knowledge of roadways and annual inspections.

Similarly, documentation of street sweeping would be onerous. Compliance with this requirement would necessitate additional Dracut staff to document the streets swept each day and the amount of material collected into a database.

Furthermore, EPA should remove the requirement to conduct street sweeping of roads and parking lots with directly connected impervious areas (DCIA) in watersheds with final TMDLs twice per year. Dracut sweeps its streets, as necessary, once per year. Dracut does not have the budget available to sweep streets twice. The appropriate frequency for street sweeping and other maintenance measures is dependent on local conditions, which are identified and monitored by DPW personnel. Requiring an arbitrary sweeping frequency will result in more sweeping than necessary in some locations.

### Additional Comments

The following section contains additional comments or requests clarification of permit requirements.

- *Storm water Management in New Development and Redevelopment:* Due to the expense and redundancy of re-surveying many miles of highway, Dracut employs construction plans to serve as as-built plans. 100% "Plans, Specifications, and Estimate" plans can be provided electronically to EPA upon request.
- *Inventory and Priority Rank Infrastructure for BMP Retrofits:* The permit requirement to inventory and rank infrastructure and properties for BMP retrofits would be expensive, have no utility for Dracut and could not be achieved within 2 years. Dracut implements BMPs during reconstruction and repair projects. During these repair projects the potential for installing BMPs is reviewed. Therefore, a separate effort to assess the potential for BMPs on a system-wide basis is unnecessary and would not change the schedule for BMP implementation.
- *Direct Discharges vs. All Discharges:* Since discharges which travel overland before discharging will not have the same impact as the direct discharges, monitoring and BMP analysis should focus on outfalls that discharge directly to receiving waters

### Costs

The following cost estimates were arrived at by the environmental/infrastructure consultants Weston & Sampson for the Merrimack Valley Planning Commission

#### Year 1: Compliance Tasks

- The cost implications to prepare an updated Notice of Intent based on the proposed watershed Based Requirements is estimated to cost from \$1,000 to \$10,000
- To update versus develop a new Storm Water Management Plan is estimated to cost from \$5,000 to \$50,000.
- The use of available resources versus developing new resources, as well as obtaining assistance from volunteer organizations could range from \$500 to \$5,000
- Depending on the availability of obtaining volunteer resources the Public Participation requirements are estimated to cost anywhere from \$500 to \$5,000.

- Depending upon whether the IDDE plan is updated or newly written and also depending upon the number of and the extent of catchment to delineate; this requirement is estimated to cost Dracut from \$2,000 to \$25,000.
- Depending upon the extent of urbanized area and the amount of prior mapping completed the estimate for required Drainage Mapping is from \$10,000 to \$100,000
- Depending upon the extent of existing mechanisms and the desire for new separate regulatory mechanisms the cost is estimated to be from \$5,000 to \$25,000
- Developing municipal O&M Procedures, given our limited in-house capabilities is estimated to cost Dracut from \$5,000 to \$10,000.
- The requirement for municipal building inspections, depending upon the number of municipal facilities the availability of as-built plans was estimated at between \$5,000 to \$25,000
- The requirement for Stormwater Pollution Prevention Plans, existing multi-sector general permits and Spill Prevention, Control and Countermeasure Plan is limited by the current availability of site plans. It is estimated that it will cost between \$3,000 to \$10,000 (per facility)

**Even by not including the last bullet, due to our uncertainty as to how many facilities would be required to develop and implement SWPPP's, total cost estimates range from \$34,000 to \$255,000.**

#### Year 2-5: Compliance Tasks

The significant tasks noted in the following bullets and their associated cost implications are among the areas of concern associated with compliance in years 2-5.

- Continuance On-Going Efforts
- Drainage Mapping (by Year 2)
- Municipal Interconnection Mapping (by Year 2)
- Impervious Area Calculations (as well as the annual update requirements)
- Amending Post-Construction Stormwater Control
- Preparation of Ordinance (by Year 2)
- Report to Assess Local Requirements Related to LID/Impervious Cover (by Year 2)
- Report to Ensure Local Regulations do not Prohibit Green Practices (by Year 3)
- Inventory/Rank MS4-Owned Property & Infrastructure for Retrofitting with BMPs to Reduce Frequency, Volume, and Peak Flow
- Dry and Wet Weather Screening & Sampling
  - 25% of Outfalls Per Year Starting in Year 2
  - Process required for locating interconnections
- IDDE
  - Scope of Investigation
  - Cost/Timeline for IDDE
  - Delineation of 100% of Catchments by Year 7
  - **This is a potential Big Ticket Item!!!**
- Cost of consultants for the preparation and execution for the "2011" Permit Notice of Intent/ SWMP for our MS4 NPDES permit.

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Given the above projected costs as well as costs that we do not recognize at this point in our review, it is believed that the proposed measures cannot be met without severe impacts to other local services that our residents currently receive.

Thank you for the opportunity to provide comment on the Draft Merrimack MS4 Permit.

Sincerely,



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Enc: Letter from Dracut DPW Director  
Email from Dracut Board of Health Director  
Rebalancing Act Editorial 12-13-2010