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June 13, 2008

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CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS  
ESTABLISHING THE SCOPE FOR THE  
2010 SNOW AND ICE CONTROL PROGRAM ENVIRONMENTAL STATUS AND  
PLANNING REPORT

PROJECT NAME : 2010 Snow and Ice Control Program Environmental Status  
and Planning Report  
PROJECT MUNICIPALITY : Statewide  
PROJECT WATERSHED : Statewide  
EOEA NUMBER : 11202  
PROJECT PROPONENT : Massachusetts Highway Department  
DATE NOTICED IN MONITOR : May 7, 2008

As Secretary of Environmental Affairs, I hereby establish the scope for the analysis to be presented in the 2010 Snow and Ice Control Environmental Status and Planning Report (ESPR). In accordance with the provisions of 301 CMR 11.00 and 11.09 Special Review Procedures, this ESPR process was established by the proponent and this office to replace the 2006 Generic Environmental Impact Report (GEIR).

Project Description

The project consists of a description of the methods used by state agencies to control snow and ice on roadways, the impact these methods have on the environment, and the mitigation implemented to compensate for these impacts. The agencies participating in this ESPR process include MassHighway, the Massachusetts Turnpike Authority (MTA), and the Department of Conservation and Recreation (DCR)). MassHighway was the designated lead agency in preparing the ESPR. The ESPR is to be the basis for snow and ice control on state-owned roadways in Massachusetts. The purpose of this ESPR is to protect sensitive resource areas and determine whether a proactive (rather than reactive) approach is needed. Three questions were posed in the Certificate of December 1, 2006 creating the ESPR process. The three questions are based on the mapping of known sensitive areas:

1. Does the nature of these sensitive areas suggest that the approach to snow and ice control should be modified to provide better protection of these areas?;
2. Alternatively, is a purely reactive approach dictated by overriding public safety concerns?; and
3. Can an intermediate approach be fashioned by developing up-front knowledge of expected impacts and designing appropriate mitigation while remaining faithful to the public safety issues?

### History and Purpose of the ESPR

Prior Generic EIRs (GEIRs) were prepared in 1978, 1995, and 2006 for the Snow and Ice Control Program. This 2010 ESPR is a continuation of this effort by MassHighway. Since 1978, the GEIR (and now the ESPR) has provided a retrospective analysis of past trends in snow and ice control on state highways and the environmental impacts from these snow and ice control measures. These documents summarize the Commonwealth's snow and ice control measures at those times. The 2010 ESPR should present an overview of the operational environment and of the planning for snow and ice control by MassHighway. It should provide the long-range projections of environmental conditions against which the effects of future snow and ice control can be compared. The ESPR allows the reviewer to see historical environmental information, current information, and the forecast of the future environmental effects of snow and ice control along the Commonwealth's roadways. It serves as a vehicle for ensuring that long-term, broad-scope planning informs the review and implementation of snow and ice control along state highways.

On May 7, 2008, the Proposed Scope for the 2010 ESPR was noticed in the Environmental Monitor. While I have used that scope as a framework for this Certificate, I have modified it based on the 2006 GEIR Scope, in response to the comments received, and internal EEA review. Therefore, this scoping certificate is the governing document for the contents of the 2010 ESPR.

### 2010 ESPR Outline

The 2010 ESPR should follow the general format of the 2006 Scope for ESPR Work Plan. The ESPR Work Plan represents a consensus, to the extent feasible, among MassHighway, MassDEP, DCR, and the Natural Heritage and Endangered Species Program (NHESP), regarding how the issues raised by the GEIR and the agency comments will be addressed. It should identify a schedule for providing that information for MEPA review in the form of subsequent ESPRs. The 2010 ESPR should use the base information developed for the 2006 GEIR, present policy considerations and an overview of MassHighway's current and potential future role in controlling snow and ice on state roadways, and include a status report on the MassHighway's proposed planning initiatives and procedures.

## SCOPE

### Executive Summary

The Executive Summary should provide a summary of the major sections of the ESPR, with supporting graphics and data tables. It should be made available as a separate document to facilitate wider distribution. The Executive Summary should be posted on MassHighway's web site. Section 1.0 through Section 5.0 should summarize the 2006 GEIR information, identify recent comments and concerns, and identify future ESPR work.

### 1.0 MassHighway's Snow and Ice Control Program Operations and Policies

The ESPR should report on snow and ice control activity levels for 2004 to 2009. This section should generally introduce the ESPR and should:

- 1.1 Describe the Snow and Ice Control Program: MassHighway's Management Structure; Program Organization; Equipment, Facilities and Operating Cost. The ESPR should include maps of the Commonwealth's roadways, highway districts and the locations of salt storage facilities, designated reduced salt zones, municipal groundwater supplies, and Road Weather Information Sensor (RWIS) locations. It should explain why the information in the GEIR did not include snow and ice control data for the MTA or DCR. In order to make this snow and ice control program statewide, the list of state agencies which provide snow and ice control along their respective roadways was expanded. MassHighway is the lead agency in this effort because it has the largest snow and ice control program statewide. MassHighway should provide correspondence from the MTA, the Massachusetts Port Authority (Massport) (Mystic/Tobin Bridge and other roads), the Massachusetts Bay Transportation Authority (MBTA), and DCR regarding their participation and cooperation with MassHighway to provide the necessary information to complete a statewide inventory of snow and ice removal within the Commonwealth. In 2005, MassHighway was given the winter maintenance responsibility for certain urban roadways managed by DCR. These Greater Boston roadways include Centre Street, Fellsway, Fresh Pond Parkway, Jamaica Way, McGrath Highway, Mystic Valley Parkway, O'Brien Highway, Revere Beach Parkway, Storrow Drive, and the VFW Parkway. The ESPR should identify snow and ice control procedures on these DCR roadways. It should discuss snow and ice removal procedures along sidewalks and crosswalks within the right-of-way of MassHighway maintained roadways. The ESPR should identify MassHighway policy for snow and ice removal along sidewalks and at crosswalks. It should identify MassHighway snow disposal/dumping guidelines.
- 1.2 Describe Historical Salt Usage vs. Winter Severity.
- 1.3 Describe Annual Training Program for Employees and Contractors.
- 1.4 Identify Salt Storage Facilities and Management Practices.
- 1.5 Describe MassHighway Vehicle Washing Practices.
- 1.6 Compare MassHighway's Snow and Ice Control Program with the Policies and Procedures Used by other New England Transportation Agencies.

## 2.0 Environmental Resource Protection and Remediation

This section should include the following items:

- 2.1 An Update of the Reduced Salt Zones.
- 2.2 Salt Complaints and the Remediation Program.
- 2.3 Summary of Public Water Supply Sodium Data.
- 2.4 Summary of Recent Research Findings Related to other Environmental Resources.
- 2.5 Environmental Impacts Associated with the Use of Sand in Deicing Operations.

## 3.0 Existing Best Management Practices for Improving Road Salt Use Efficiency

This section should include the following items:

- 3.1 Anti-Icing and Pre-Wetting Techniques.
- 3.2 Alternative Deicers.
- 3.3 Road Weather Information Sensor (RWIS) Systems.
- 3.4 Summary of Other Best Management Practices (BMPs) including Pavement Temperature Sensors, Snow Fences, Modified Drainage Systems, Alternative Pavements, etc.

## 4.0 Roadway Infrastructure and Vehicle Corrosion Damage

This section should contain information on roadway infrastructure and vehicle corrosion damage.

## 5.0 Economic Benefits of Safe Roadway Conditions

This section should provide information on the benefits of safe roadway conditions.

## 6.0 Conclusions/Recommendations/Mitigation

The ESPR should include a separate chapter on MassHighway's conclusions/recommendations and mitigation measures that were incorporated into the ESPR. In the ESPR, the proponent should commit to evaluating its snow and ice control program every five years to respond to changing conditions. MassHighway should review the following topics during its evaluations:

- Avoidance of sensitive areas for the location of salt sheds
- Salt application rates
- Snow-fighting equipment
- Expansion or elimination of reduced salt zones
- Evaluation of spreader routes to maximize efficiency and eliminate overlap

- Consideration of alternative deicing chemicals, and the implementation of Best Management Practices (BMPs) for all MassHighway construction/repaving projects within sensitive reduced salt zones
- Salt storage management practices including housekeeping practices
- Statewide training program and materials for MassHighway personnel and snow and ice contractors

The proponent should identify the dollar amount of its recommendations/mitigation measures. MassHighway stated that it spends an additional \$2,000 per lane mile in designated reduce salt areas. It also reported providing \$ 230,000 to 23 municipalities to upgrade their salt storage facilities.

### 7.0 Response to Comments

The ESPR should address the issues raised in comment letters on the 1997 and 2006 GEIRs and comments on MassHighway's Work Plan for the ESPR. It should include copies of all comment letters listed at the end of the prior Certificates in 1997, 2006, and this Certificate. The ESPR should provide a response to all comment letters within the scope of this project. MassHighway should specifically address the issues raised in the MassDEP letter of June 6, 2008.

### 8.0 Circulation

The ESPR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should be sent to the list of "comments received" at the end of this Certificate and the Certificates on September 24, 1997 and December 1, 2006. A copy of the ESPR should be made available for public review at the State Transportation Library.

### 10.0 MEPA Documentation

The ESPR should include a copy of this Certificate, and it should be made available in printed or CD-ROM format.

Along with reliable information, ongoing public involvement will be key to a successful ESPR process. As part of its public information efforts, MassHighway should:

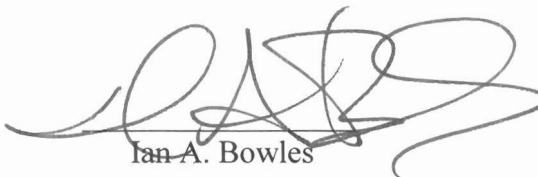
- Convene one technical workshop during the public review process for MassDEP, NHESP, DCR, Massport, Mass Turnpike, and the MBTA prior to submitting the Draft and Final ESPR.
- Convene one public meeting as part of the MEPA hearing during the review of the Draft and Final ESPR.

MassHighway has agreed to meet with MassDEP, NHESP, and the Area of Critical

Environmental Concern (ACEC) Program Coordinator on an annual basis around May or June to provide a brief update on recent changes and information related to the Snow and Ice Control Program. It has proposed the following future ESPR Preparation Schedule:

- January 2010 – Initiate Compilation of Relevant Data (2003 - Winter 2009/10);
- January 2011 – Initiate Preparation of Draft ESPR;
- January – June 2011 – Consult/Coordinate with Resource Agencies and other Massachusetts Transportation Agencies;
- December 2011 – Release Draft ESPR for Agency and Public Comment;
- January – April 2012 – Incorporate Agency and Public Comments into Final ESPR; and
- June 2012 – Release and Distribute Final ESPR.

June 13, 2008  
Date



Ian A. Bowles

Comments received:

- DCR, 3/10/08
- MassHighway, 5/14/08
- Connecticut River Watershed Council, 6/5/08
- Norton Conservation Commission, 6/5/08
- DCR, 6/6/08
- Stephen H. Kaiser – Friends of the Parkways, 6/6/08
- WSCAC, 6/6/08
- Ingeborg Uhlir, 6/6/08
- Boston Environment Department, 6/9/08
- MassDEP, 6/6/08

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