*The Commonwealth of Massachusetts*
*Executive Office of Environmental Affairs*
*100 Cambridge Street, Suite 900*
*Boston, MA 02114*

Deval L. Patrick
GOVERNOR

Timothy P. Murray
LIEUTENANT GOVERNOR

Ian A. Bowles
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1181
http://www.mass.gov/envir

April 6, 2007

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
2nd NOTICE OF PROJECT CHANGE

| | |
|---|---|
| PROJECT NAME | : New Bedford Regional Airport Improvements |
| PROJECT MUNICIPALITY | : New Bedford |
| PROJECT WATERSHED | : Buzzards Bay |
| EOEA NUMBER | : 10316 |
| PROJECT PROPONENT | : City of New Bedford |
| DATE NOTICED IN MONITOR | : March 7, 2007 |

Pursuant to the Massachusetts Environmental Policy Act (M.G.L. c.30, ss.61-62H) and Section 11.17 of the MEPA regulations (301 CMR 11.00), I have reviewed the Notice of Project Change (NPC) submitted on this project and hereby determine that it **requires** the preparation of a Final Environmental Impact Report (FEIR). While I find that the 2nd NPC is adequate, additional information must be submitted in the FEIR before I can make a finding that the project complies with MEPA. The FEIR submitted for this project must provide additional information pertaining to the potential project-related direct and indirect impacts to wetlands, rare species and stormwater management for the proponent's preferred Runway Safety Alternative (RSA) as required by this Certificate.

## Background

Originally proposed in an April 1995 Environmental Notification Form (ENF), the project involved the development of a series of airport improvements designed to improve safety at the existing airport and to attract and accommodate air passenger, corporate jet, and air cargo business activity within the Southeastern Massachusetts service area.

Specifically, the proponent's preferred alternative (Airport Improvement Alternative – AIA) included 9 separate elements:

1) extending Runway 5-23 by 3,000 linear feet (lf) (6,700 lf total)) with new Runway Safety Areas (RSA's),
2) realignment and extension (8,000 lf total) of Taxiway A parallel to Runway 5-23;
3) construction of a new 3,100 lf Taxiway F parallel to Runway 14-32;
4) realignment and reconstruction of Taxiway B (4,800 lf total);
5) improvements to Terminal Area including airline apron, terminal building, and vehicle parking area;
6) General Aviation facilities improvements;
7) land acquisition in runway protection zones (RPZs);
8) clearing of forested wetlands resource areas to create required clear zones over runway approach and departure areas; and,
9) relocating a portion of New Plainville Road.

The airport improvement project was designed to accommodate a portion of the estimated future (2021) increase in corporate jet, general aviation and air cargo enplanements (airside development program) anticipated for the Southeastern Massachusetts region, and related or induced commercial development within the New Bedford Regional Airport (landside development program).

As originally proposed, this airport improvement project is subject to review and preparation of a mandatory EIR pursuant to Sections 11.03 (1)(a)(1), 11.03 (1)(a)(2), 11.03 (2)(b)(2), 11.03 (3)(a)(1) and 3(a)(2), 11.03(6)(a)(4) and (6)(b)(3) (6)(b)(4) of the MEPA regulations because it involves the direct alteration of 50 or more acres of land (approximately 110.0 acres total), the creation of more than 10 acres of new impervious surface area (46.6 acres total), the alteration of rare species habitat, the construction of a new terminal and new taxiway, and the expansion of an existing runway at an airport, respectively. The project requires a 401 Water Quality Certification and the issuance of a variance by the Department of Environmental Protection (DEP) under the Wetlands Protection Act; a Conservation and Management Permit by the Division of Fisheries and Wildlife (DFW), an Order of Conditions from the New Bedford Conservation Commission (and hence a Superseding Order from DEP if the local Order were appealed), and a federal wetlands permit under Section 404 of the Federal Clean Water Act from the US Army Corps of Engineers (ACOE). The project must comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges from a construction site of over one acre from the U.S. Environmental Protection Agency (EPA). Because the proponent is seeking financial assistance from the Massachusetts Aeronautics Commission (MAC), MEPA jurisdiction is broad and extends to all aspects of the project that may cause damage to the environment.

In January 2003, the proponent proposed taxiway improvements and other airfield alterations (EOEA #12954) in compliance with the April 2002 New Bedford Regional Airport Layout Plan. The proposed taxiway improvements involved the construction of a 113,536 sf general aviation parking apron, and a 430 linear foot extension of Taxiway "B" from approximately 5,000 linear feet to approximately 5,430 linear feet total. According to the information provided by the proponent, the Aviation Ramp construction and Taxiway B extension project work was separate and distinct from the work proposed under the proponent's airport expansion project (EOEA #10316).

A Notice of Project Change (NPC 1) was filed in August 2003 and requested a Phase I waiver to proceed with improvements to Taxiway B prior to completing the EIR for the airport expansion project as a whole. A Certificate granting the proponent's NPC Waiver Request was issued on April 8, 2003.

In February 2005, the proponent filed a Draft Environmental Impact Report (DEIR) with the MEPA Office that described the potential environmental impacts associated with the proponent's preferred AIA project alternative including; the filling of approximately 35 acres of vegetated wetlands, culverting of 5,350 linear feet of stream channels, clearing of vegetation in 82 acres of wetlands and 80 acres of uplands, filling of five vernal pools that provide habitat for state-listed rare species, and placement of over three million cubic feet of fill in floodplains. The AIA project alternative would result in extensive impacts on the habitat of at least five state-listed rare species; on the Apponagansett Swamp ecosystem, on the watershed of Town of Dartmouth public water supply wells; on floodplain storage volume; and on public conservation land in the Acushnet Cedar Swamp and Town of Dartmouth. As expressed in the many comments received on the DEIR submittal, the potential environmental impacts anticipated from the proposed New Bedford Regional Airport Improvement Project were extensive and unprecedented. MassDEP indicated that the AIA alternative lacked a clear overriding public interest. In addition, the DEIR did not contain an adequate description of the airport improvement project's direct, indirect and cumulative environmental impacts, and lacked clearly defined and adequate mitigation that would allow the project to be conditioned so as to contribute to the protection of the interests of the Wetlands Protection Act. As a result, the project did not appear to meet the variance eligibility requirements of the Wetlands Protection Act regulations. The Natural Heritage and Endangered Sepecies Program (NHESP) submitted comments regarding the inadequacy of rare species impact documentation and indicated that the proponent had not successfully demonstrated that the project is permittable under the Massachusetts Endangered Species Act. According to the comments received from the Department of Conservation and Recreation (DCR), the project's extensive impacts to the Acushnet Cedar Swamp State Reservation required the need for further evaluation of the project's consistency with Federal Section 4(f) functional land replacement requirements, Article 97 land disposition policies, and the terms and conditions of the Conservation Restriction (CR) for a portion of the Acushnet Cedar Swamp State Reservation established under a judicial Consent Decree between the Commonwealth of Massachusetts and the EPA.

The Secretary's Certificate (April 29, 2005) found that the DEIR did not adequately demonstrate that the project can meet the variance eligibility requirements under the Wetlands Protection Act. The Secretary's Certificate required the proponent to prepare and submit a Supplemental DEIR (SDEIR) to provide additional information regarding the proposed AIA project's purpose and need, wetlands, rare species, water supply, drainage, and mitigation, and to demonstrate the regulatory viability of the proposed project before proceeding with the preparation of FEIR.

Notice of Project Change / RSA Alternatives

As described in this 2nd Notice of Project Change submittal, the project has been re-designed in response to the comments received on the DEIR submittal, and the expressed concerns for the permitability of the AIA project under the Wetlands Protection Act.

As currently proposed, the proponent's airport improvement project focuses on improving the safety of aircraft and passengers by constructing runway safety areas (RSAs) for Runways 5-23 and 14-32 to meet runway safety standards established by the Federal Aviation Administration (FAA) for the protection of aircraft, pilots and passengers. Improvements to the Airport's existing substandard RSAs will reduce the risk of aircraft damage and personal injury should aircraft undershoot, overshoot or veer off a runway. According to the proponent, the proposed Airport Improvement project fulfills an overriding public interest for safety.

The proponent has proposed three alternative RSA scenarios (Alternative 1, Alternative 2, Alternative 3) to enhance the safety of the airport while significantly reducing the potential impacts to environmental resources located within and adjacent to the project site. Each of the three RSA project alternatives will result in substantial reductions in direct and indirect environmental impacts compared to the potential environmental impacts associated with the proponent's previously proposed AIA project proposal. The RSA project alternatives all involve the proposed tunnel construction of a 700 linear foot (lf) portion of New Plainville Road to be located under the north end of Runway 23 to provide the required clearance between the proposed RSA for Runway 23 and New Plainville Road without impacting the Acushnet Cedar Swamp State Reservation.

RSA Alternative 1 would involve approximately 5.15 acres of permanent impacts to federal and state wetlands and approximately 11.50 acres of alteration of forested wetlands and upland rare species habitat as part of the proponent's proposed Vegetation Management Plan (VMP) in compliance with the FAA's requirements for maintaining a safety zone at the end of airport runway approaches. Alternative 1 would also result in the filling of approximately 1,080 cubic yards of Bordering Land Subject to Flooding (BLSF), and the alteration of 2,260 linear feet of inland bank.

RSA Alternatives 2 and 3 have similar environmental impacts including the permanent alteration of approximately 3.81 acres of federal and state wetlands, and the filling of approximately 1,110 cubic yards of Bordering Land Subject to Flooding (BLSF). Alternatives 2 and 3 also include the alteration of forested wetlands and upland rare species habitat (approximately 11.50 acres) as part of the proponent's VMP.

In addition to the proposed runway safety improvements, the proponent's New Bedford Airport Improvements project also includes planned improvements to Aircraft Rescue and Firefighting (ARFF) facilities and to General Aviation (GA) facilities to accommodate the Airport's existing and anticipated future demand for passenger, corporate jet and GA users. Implementation of the proposed Airport Safety Improvements Project will occur over a 10-15 year period. I note that as currently proposed, a variance under the Wetlands Protection Act would still be required for the New Bedford Regional Airport Improvements project.

In their comments on this 2nd NPC submittal, MassDEP, NHESP, and DCR, along with the New Bedford Conservation Commission, the Massachusetts Audubon Society, and the Sierra Club have expressed support for the proponent's proposed Airport Improvement Project and RSA alternatives. However, these commenters have also identified the need for additional information pertaining to the proponent's assessment and proposed mitigation of potential environmental impacts to wetlands, rare species, and stormwater management.

Wetlands

The 846-acre Airport site is surrounded by the Apponagansett Swamp and the Acushnet Cedar Swamp, two of the largest remaining freshwater wetland resource areas in Massachusetts. These unique and important wetland resource areas are located at the headwaters of the Paskamanset River, which flows through the Town of Dartmouth into the Slocum River and to Buzzards Bay, and serve important statutory public interests including rare species habitat, storm damage prevention, flood control, and protection of public and private water supplies. In 1972, the Secretary of the Interior identified the distinctive quality of the Acushnet Cedar Swamp's Atlantic White Cedar stands and designated the Acushnet Cedar Swamp State Reservation as a National Natural Landmark. The Acushnet Cedar Swamp State Reservation is subject to a Consent Decree and Conservation Restriction, signed by the Department of Conservation and Recreation (DCR), the Department of Corrections, the EPA, Division of Capital Asset Management (DCAM) and the Attorney General's Office.

The three RSA project alternatives described in the 2nd NPC document will require the filling of up to 5.16 acres of federal jurisdiction wetlands and approximately 3.5 acres of state jurisdiction wetlands, including the filling of Certified Vernal Pools that are classified as Outstanding Resource Waters (ORW). The airport improvement project will also result in the alteration (cutting) of approximately 11.5 additional acres of forested wetland resource areas as part of the proponent's proposed vegetation management plan. According to the comments received from the New Bedford Conservation Commission, most of the RSA project's wetlands impacts are located in wetland areas that were once forested wetlands and that have been cutover as part of the Airport's ongoing vegetation management activities. The New Bedford Conservation Commission has requested that the proponent's wetlands mitigation plan locate some on-site wetland replication areas away from VMP areas to allow for the replication of forested wetlands. As noted elsewhere in this Certificate, each of the three RSA project alternatives involves the proposed tunnel construction of a 700 lf portion of New Plainville Road to be located under the north end of Runway 23 to provide the required clearance between the proposed RSA for Runway 23 and New Plainville Road without impacting the Acushnet Cedar Swamp State Reservation. According to the comments received from DCR, alterations of wetlands and uplands adjacent to the Acushnet Cedar Swamp, including the proposed construction of a subsurface tunnel, could adversely impact the hydrology of the Atlantic White Cedar. The FEIR should respond to DRC's comments and include a discussion of the proposed tunnel's potential impacts to surface and groundwater conditions located near to the Acushnet Cedar Swamp. Many commenters have requested that the project proponent endeavor to identify additional opportunities for project design refinements that would result in additional reductions in wetlands impacts, and rare species habitat loss. The FEIR should respond to these comments.

Wetlands Replication Plan

The proponent's wetlands replication and environmental mitigation plan identifies a total of six on-site locations proposed to serve as suitable wetlands resource mitigation areas. The proponent has committed to providing approximately 12.4 acres of on-site wetland mitigation (a 2:1 ratio). In their comments on this 2nd NPC submittal, MassDEP, MassAudubon and others have requested that the proponent provide additional information in the FEIR pertaining to the sequencing of the proponent's wetlands mitigation plan as it may relate to the proposed project construction phasing.

MassDEP has also requested that the proponent finalize the project's wetlands mitigation plan and commence wetlands mitigation activities prior to incurring project construction impacts to BVW resources areas. The wetlands mitigation plan should also contain a schedule for implementing the individual components of the proposed mitigation, based on the construction phases of the proposed airport improvement project. The proponent's wetlands mitigation plan should include cost estimates for individual components of the mitigation plan, identification of funding sources, and the identification of the parties responsible for implementing the plan's individual mitigation components. The FEIR should explain how the proponent's proposed mitigation program funding was calculated.

WPA Variance

In order for the proponent's preferred RSA project alternative to be implemented, the Commissioner of MassDEP will need to issue a variance from the Wetlands Protection Act regulations. As MassDEP has indicated in their comments on this 2nd NPC and on previous MEPA submittals for this project, wetland variances have historically been issued by MassDEP only in rare and unusual circumstances involving the protection of public health, the protection of public safety, and environmental improvements. The variance eligibility standards (310 CMR 10.05) require the project proponent to satisfactorily demonstrate:

1) there are no reasonable conditions or alternatives that would allow the project to proceed in compliance with the Wetlands Regulations;
2) mitigation measures are proposed that will allow the project to be conditioned so as to contribute to the protection of the interests identified in the Wetlands Protection Act; and
3) the variance is necessary to accommodate an overriding community, regional, state or national public interest.

I commend the proponent's efforts to focus on improving the safety of aircraft and passengers by constructing runway safety areas (RSAs) for Runways 5-23 and 14-32 to meet runway safety standards established by the FAA. As currently proposed, the New Bedford Airport Improvements project will achieve this laudable public safety interest while substantially reducing the project's direct and indirect environmental impacts compared to the potential environmental impacts associated with the previously proposed AIA project proposal. I am encouraged by the prospect of the project's permittability under the Massachusetts Wetlands Protection Act, the Clean Water Act, the Massachusetts Endangered Species Act, and the Department of Transportation Act of 1966 s. 4(f).

Rare and Endangered Species

In their comment letter, NHESP identified habitat for five state listed rare species within the project site including: American Bittern (*Botaurus lentiginosus*); Coastal Swamp Amphipod (*Synurella chamberlaini*), Spotted Turtle (*Clemmys guttata*); Eastern Box Turtle (*Terrapene Carolina*); and Four-toed Salamander (*Hemidactylium scutatum*). DCR has noted that rare insects (Lepidoptera and Odonates) may also occur within the affected portion of the Acushnet Cedar Swamp. NHESP has indicated that the NPC does not contain sufficient information to adequately quantify the potential direct and indirect impacts associated with the proponent's preferred RSSA project alternative.

According to NHESP, the proponent should complete a rare species habitat survey of the project site to document the extent of the local populations of the affected rare species, and to quantify the extent of remaining habitat that will not be affected by the proposed project. NHESP has indicated that while the proponent may be able to design an adequate Eastern Box Turtle mitigation plan without conducting a rare species habitat survey of the project site, the proponent may be well advised to complete a the survey work to avoid potential project permitting delays. As a result, the proponent should consider conducting the Eastern Box Turtle survey work this Spring to determine the presence and extent of rare species throughout the airport project site. I ask that the proponent work closely with NHESP to determine the appropriate survey protocols. (If rare turtles are encountered, the proponent may need to undertake radio telemetry studies.) Should the proponent conduct rare species habitat surveys, the FEIR should clearly identify, on an appropriately scaled map, land areas located within the airport project site that may be designated in the proponent's mitigation plan as protected habitat translocation areas, habitat management areas or habitat protection areas. The FEIR should include a copy of the proponent's VMP and a detailed analysis of its impacts of the affected rare species habitats. The FEIR should include a habitat management plan for all existing and proposed grassland and shrubland areas located within the project site that reflects current conditions and knowledge of existing rare species. The habitat management plan should contain a detailed monitoring plan that will enable the proponent and NHESP to evaluate the success of the proponent's proposed habitat mitigation activities. The FEIR should respond to the comments and recommendations provided by NHESP. I recommend that the proponent include in the FEIR an investigation of additional opportunities to refine the proponent's preferred RSA project alternative to further reduce the extent of proposed wetland fill and impacts to and elimination of rare species habitat within the project area, and to provide detailed plans for impact minimization and net-benefit mitigation.

Stormwater/Drainage

The FEIR should provide a detailed discussion of the consistency of the proposed airport drainage and stormwater management system with the MassDEP Stormwater Management Guidelines for the 2, 10 and 100-year storm events. The FEIR should include a drainage plan for the proponent's preferred RSA project alternative. The FEIR must provide sufficient information on the location and types of proposed stormwater management facilities and structural BMPs included in the proponent's stormwater management plan to collect, treat and provide total recharge of stormwater generated in the 2021build scenario to the groundwater and wetland resources areas located in the project area. This conceptual drainage plan for the preferred RSA development scenario should analyze both direct and indirect (i.e. changes in drainage patterns) impacts on wetland resource areas.

The Paskamansett River provides recharge to the aquifer that serves the Town of Dartmouth's public water supply wells. The FEIR should address the airport improvement project's potential impacts to the groundwater recharge areas serving the existing and proposed public and private water supplies located in the Town of Dartmouth. The proponent should give serious consideration to installing one or more monitoring wells downgradient of the project site to monitor and evaluate the impacts of the proponent's stormwater management plan on adjacent wetland resource areas and local Town of Dartmouth groundwater resources.

The FEIR should include a copy of the proponent's Stormwater Pollution Prevention Plan (SWPPP) and an Installation Spill Contingency Plan (ISCP) covering current operations. The FEIR should provide a detailed description of the proponent's proposed mitigation measures to ensure compliance with DEP's Stormwater Management Guidelines. The proponent's drainage analysis and stormwater management plan and mitigation measures should apply to the entire 846-acre airport site, and should include the runway safety and general aviation project development phases. The FEIR should respond to comments regarding the potential hydrologic impacts of the proposed tunneling of a portion of New Plainville Road on the Atlantic White Cedar Swamp natural wetland community located adjacent to the project site.

The FEIR should further investigate feasible methods of reducing impervious surfaces located within the airport project site for the preferred RSA alternative. The FEIR should provide additional information comparing and contrasting the potential environmental impacts and life-cycle costs associated with the use of Engineered Materials Arresting System (EMAS) versus standard runway pavement in the construction of the proposed RSAs. I also ask that the proponent consult with the Department of Conservation and Recreation (DCR) to consider incorporating low impact development (LID) design measures into the project design to improve the management of stormwater runoff from the proposed project site. I strongly encourage the proponent to consider incorporating the use of such LID measures as permeable surface parking materials and landscaped bioretention areas to significantly reduce the total amount of impervious area and stormwater runoff from the proposed airport improvement project.

## Traffic

According to the information provided in the 2nd NPC, the estimated increase in airport traffic under any one of the three RSA project alternatives is approximately 104 new vehicle trips per day (vtd) and includes new vehicle trips generated by the proponent's runway safety and general aviation facilities improvement program activities. The FEIR should discuss the need for any traffic mitigation for the preferred RSA project alternative including signalization, signage, and roadway improvements, for project area roadways located in the Town of Dartmouth and City of New Bedford. I strongly encourage the proponent to consult with the Town of Dartmouth, City of New Bedford and the Massachusetts Highway Department (MHD), and the Southeastern Regional Planning & Economic Development District (SRPEDD) on transportation issues during the preparation of the SDEIR.

## Noise and Vibration

The three RSA project alternatives described in the proponent's airport improvement project do not result in a significant noise impact to any sensitive sites located within the project area. As described in the information provided by the proponent, RSA Alternatives 1, 2 and 3 will create only moderate noise impacts (increase of 1.5 dB – 3.0 dB) primarily in the neighborhoods located northeast of the Airport along New Plainville Road, at The Willows condominium development, and 2 -3 single-family residences located at the ends of Haskell Street, Cox Street and Downey Street. According to the proponent, the moderate noise impacts resulting from the proponent's RSA alternatives do not require mitigation.

The FEIR should include a discussion of the proponent's commitment to regularly monitor and re-evaluate the New Bedford Regional Airport noise environment to identify changes in the 65 dB DNL contour over time. The FEIR should describe the procedure for recording and addressing noise complaints from the community. In this context, I strongly encourage the proponent to form a Noise Working Group to study and monitor airport-related noise issues.

Construction Period Impacts/Coordination

The construction period will be the major source of impacts from the RSSA project alternative, including impacts from earth moving, impacts to vegetation, potential impacts from erosion and sedimentation, impacts to publicly owned and privately-owned land and wetland resource areas in the project area, and traffic impacts on adjacent roadways. I strongly encourage the proponent to commit to reseeding and replanting those portions of the construction corridor located adjacent to Article 97 lands, and endangered species habitat, with appropriate native species of grasses, woody shrubs and trees.

The proponent will need to consult with MassDEP, NHESP, DCR, and the New Bedford Conservation Commission, in the development and scheduling of re-seeding and re-planting activities. All construction-related refueling and equipment maintenance activities should be conducted under cover on impervious surface areas with containment, and outside of any wetlands resource areas, endangered species habitat areas, residential areas and wellhead protection areas. The proponent should require its contractors to retrofit diesel-powered equipment with emissions controls, such as particulate filters or traps, and use low-sulfur diesel fuel pursuant to MassDEP's Clean Construction Equipment Initiative.

Mitigation/Section 61

The FEIR should include a proposed Section 61 Finding for all state permits required for the proposed airport improvement project. The proposed Section 61 Finding should contain a clear commitment to mitigation, an estimate of the individual costs of the proposed mitigation, and the identification of the parties responsible for implementing the mitigation. A schedule for the implementation of mitigation, based on the construction phases of the project, should also be included.

Response to Comments

The FEIR should follow MEPA regulation 11.07 as modified by this scope and must respond to the comments received. I recommend that the proponent use either an indexed response to comments format, or else direct narrative response. The FEIR should present any additional narrative or quantitative analysis necessary to respond to the comments received.

FEIR Distribution

The FEIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should also be sent to the list of "comments received" below and to the municipal officials for the City of New Bedford and the Town of Dartmouth. A copy of the FEIR should be made available for public review at the public libraries for the City of New Bedford and the Town of Dartmouth.

April 6, 2007
DATE

Ian A. Bowles, Secretary

Comments received:

| | |
|---|---|
| 04/22/05 | Town of Dartmouth, Selectboard |
| 04/25/05 | The Coalition for Buzzards Bay |
| 02/25/05 | Department of Environmental Protection (MassDEP) |
| 04/26/05 | Natural Heritage and Endangered Species Program (NHESP) |
| 04/26/05 | Department of Conservation and Recreation (DCR) |
| 04/26/05 | Sierra Club |
| 04/26/05 | MassAudubon |
| 03/28/07 | City of New Bedford, Office of the Mayor |
| 03/26/07 | New Bedford Regional Pilots Association |
| 03/19/07 | Donald Velozo |
| 03/26/07 | John Fournier |
| 04/29/05 | Massachusetts Association of Conservation Commissions |

2nd NPC #10316
IAB/NCZ/ncz