

**STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL ASSESSMENT CHECKLIST**

Date: May 7, 2013

Project Name: Igor I. Sikorsky Memorial Airport Runway Safety Area Project

Municipality: Stratford

Staff Contact: Mark Alexander

This assessment is being conducted in conformance to the Connecticut Department of Transportation's Environmental Classification Document (ECD) to determine Connecticut Environmental Policy Act (CEPA) obligations.

Project Description:

The Connecticut Department of Transportation (CTDOT) and the City of Bridgeport are proposing to construct improvements to the Runway Safety Area (RSA) adjacent to Runway 24 at the Igor I. Sikorsky Memorial Airport (BDR), in Stratford, Connecticut. A partial relocation of State Route 113 is required to accommodate the RSA improvements. These safety improvements include the construction of an Engineered Material Arresting System (EMAS) beyond the Runway 24 threshold. The proposed improvements also include the rehabilitation of existing Runway 6-24. A congressional mandate has been issued requiring completion of the airport safety improvements by December 2015. There will also be a reduction in flooding of Route 113, and improved stormwater management and treatment as a result of the project.

The proposed project includes the following activities within the airport proper:

- Construction of an RSA that is 500 feet in width (250 feet on either side of the runway centerline) by 300 feet in length, including installation of an EMAS (100 feet in width by 300 feet in length);
- Installation of new runway edge lights on Runway 6-24;
- Relocation of Runway End Identifier Lights (REILS);
- Construction of a new connector taxiway (35 feet in width by 300 feet in length) from Taxiway A to Runway 24 and demolition of the existing connector Taxiway D at the intersection of Runways 6-24 and 11-29;
- Removal of the existing blast fence located adjacent to Runway 24;
- Installation of new Airport Security Fence;
- Construction of a Turn Around for Runway 6;
- Rehabilitation and removal of pavement (reduction in width) on Runway 6-24;
- Relocation of the Visual Approach Slope Indicator (VASI) and Precision Approach Path Indicator (PAPI) visual landing aids on Runways 6 and 24; and
- The construction of wetland mitigation and listed species mitigation areas.

The proposed project includes the following activities within the vicinity of Route 113:

- Construction of a realigned segment of Route 113 including an improved stormwater drainage system and multi-use path (to accommodate the RSA);
- Relocation of all underground utilities from the existing Route 113 right-of-way to the proposed right-of-way;
- Closure and removal of the abandoned segment of Route 113;
- Removal and disposal of existing Raymark Superfund Site waste materials within the vicinity of the realigned Route 113;
- Construction of a new tidal channel to convey treated stormwater runoff and tidal flows;
- Wetland mitigation activities including restoration and enhancement areas; and
- Creation and enhancement of listed species mitigation areas.

Regulations of Connecticut State Agencies (RCSA) Section 22a-1a-3 Determination of Environmental Significance (Direct/Indirect)

1. Impact on air and water quality or on ambient noise levels

- a) *Air Quality* – No negative impacts are anticipated. Historically, BDR has serviced a significant level of commercial service carriers for an airport its size, although currently most activity at the airport is classified as General Aviation (GA). Further, because the level of annual GA operations currently occurring at BDR is less than 180,000, no quantitative assessment of air quality is required by the National Environmental Policy Act (NEPA) per FAA Order 5050.4B.

In May 1999, Fairfield County was in severe non-attainment for ozone (O₃), and currently Fairfield County is in moderate non-attainment. The area was also in non-attainment for carbon monoxide (CO) in 1999 and is now in attainment. It was classified as attainment for all other criteria pollutants in 1999. Fairfield County is currently in moderate non-attainment for 8-hr O₃, and non-attainment for particulate matter (both the annual Particulate Matter (PM) 2.5 and 24-hour PM 2.5 standards).

Construction of the RSAs at BDR would involve temporary emissions from construction equipment, asphalt paving, and the generation of fugitive dust during land clearing and pavement demolition. The total project-related emissions of CO are well below the applicable de minimis thresholds for CO maintenance areas as identified in the Written Re-evaluation of the Federal Environmental Impact Statement, Section 4.1 and Appendix C. Volatile Organic Compound (VOC) and oxides of nitrogen (NO_x) emissions are also well below the applicable de minimis thresholds for “moderate” ozone non-attainment area, signifying that project emissions do not interfere with the air quality goals of the area’s O₃ State Implementation Plan (SIP), and that the project is therefore considered a de minimis action.

In addition, because the Connecticut Department of Energy and Environmental Protection (DEEP, formerly DEP) evaluates emissions of PM_{2.5} precursors NO_x and Sulfur dioxide (SO₂) in addition to directly emitted PM_{2.5} in their PM_{2.5} Attainment

Demonstration SIP, the project emissions are also compared against the applicable PM2.5 de minimis thresholds for these pollutants. Project-related emissions of NOx, SO2 and directly emitted PM2.5 are well below the applicable de minimis thresholds. Accordingly, the project is considered a de minimis action and conforms to the area's PM2.5 SIP.

Notably, in revisions to the General Conformity regulations finalized in April 2010, EPA removed the regional significance test from the applicability requirements of the General Conformity Rule. Hence, no regional significance analysis was conducted on the project-related construction emissions. However, it is not expected that these emissions would constitute greater than ten percent of the regional emissions budget in either applicable SIP, the criteria for regional significance under the previous regulations.

Based on the air quality analysis, the CTDOT finds that the Proposed Project will not:

- Cause or contribute to any new violation of any standard in any area;
- Interfere with provisions in the applicable implementation plan for maintenance of any standard;
- Increase the frequency or severity of any existing violation of any standard in any area; and
- Delay timely attainment of any standard or any required interim emissions reductions or other milestones in any area including, where applicable, emission levels specified in the applicable implementation plan for purposes of a demonstration of reasonable further progress, a demonstration of attainment, and a maintenance plan.

b) Water Quality-

The project study area is located at the junction of two major water sources: the Housatonic River and the Long Island Sound. The study area is bisected by two drainage basins: Marine Basin and Stratford Great Meadows sub-basin, which is within the Southwest Coast Basin.

Water resources within the project area consist of surface and ground waters. The State of Connecticut has adopted standards to protect water quality. These Water Quality Standards are administered by DEEP and were established to identify designated uses for surface and ground waters and identify criteria necessary to support those uses.

SURFACE WATER QUALITY

Within the vicinity of the Airport, two different surface waters exist, as depicted on State of Connecticut Surface Water Quality Maps (CTDEP 2011). There are surface waters to the west and southwest of the Airport with a surface water quality of "SB" (These waters are designated for: habitat for marine fish, other aquatic life and wildlife; commercial shellfish harvesting; recreation; industrial water supply; and navigation). Most of these surface waters are located in the Great Meadows marsh complex, to the west of the Airport. The Housatonic River, Marine Basin and associated ditches on the eastern side of the airport are also classified as "SB". Frash Pond to the north of the Airport and other smaller pockets of surface water surrounding the Airport are classified

as “A” (These surface waters are designated for: habitat for fish and other aquatic life and wildlife; potential drinking water supplies; recreation; navigation; and water supply for industry and agriculture). Many of these surface water features are hydraulically connected by human-made ditches.

GROUNDWATER QUALITY

Based on State of Connecticut Ground Water Quality Maps (CTDEP 2009), the entire project area is located in a groundwater classification area of GB. The Connecticut Ground Water Quality Standards (CTDEP 1996) describe the GB classification as: Ground water within a historically highly urbanized area or an area of intense industrial activity and where public water supply service is available. Such ground water may not be suitable for human consumption without treatment due to waste discharges, spills or leaks of chemicals or land use impacts.

Class GB ground waters are designated for use in industrial processes and cooling waters; base flow for hydraulically-connected surface water bodies; presumed not suitable for human consumption without treatment.

Based on the existing surface and ground water quality classifications within the project area, it is not anticipated that the project would have negative impacts to surface or groundwater quality. The re-establishment of tidal flow as a result of the project would likely improve water quality in the wetlands with restricted tidal action due to more regular flushing of those wetlands.

- c) *Ambient Noise Levels*- No negative impacts are anticipated. The proposed improvements would not result in an increase in the number of aircraft operations, a change in aircraft types, or a change in day/night operational splits, which are factors that could result in a change in noise exposure, therefore, no noise analysis was conducted.
2. *Impact on a public water supply system or serious effects on groundwater, flooding, erosion, or sedimentation*
- a) *Water Supply* – The project area is not within a public water supply source water area.
 - b) *Groundwater* – The proposed drainage system for this project would be a combination of vegetative swales, closed drainage systems, and overland sheet flow. A roadside swale runs along portions of both the west and east side of the proposed roadway. This runoff ultimately would drain to the Marine Basin. A small portion of the project does not drain to the Marine basin but towards Sniffens Lane and down through the airport property.
The realignment of State Route 113 project will incorporate primary (infiltration basins) and secondary stormwater treatment practices (deep sump catch basins).

As a result of the proposed drainage improvements and inclusion of primary and secondary stormwater treatment practices, which conform to the greatest extent feasible with the 2004 CT Stormwater Quality Manual, it is anticipated that the quality of stormwater would improve and in turn help improve groundwater.

- c) *Flooding* - The proposed project is within the 100-year floodplain. The alternatives analysis has determined that avoidance of work within the 100-year floodplain is not practicable, since the project is fixed by function to occur within the 100-year floodplain. The proposed roadway profile low point would be raised approximately 1.5 feet above the existing low point of the roadway profile, which would help to reduce the frequency of roadway flooding in this area. The final project design will comply with all permitting requirements to ensure that additional impacts to the 100-year floodplain are minimized to extent practicable, while still providing some roadway improvements.

 - d) *Erosion or Sedimentation*- All construction-related water quality impacts from implementation of the proposed project would be temporary and indirect, and could result from the removal of vegetation and grading activities and the operation of earth-moving equipment. These temporary and indirect water quality impacts could likely result from soil erosion/sedimentation and the introduction of pollutants from construction machinery. Potential temporary water degradation due to erosion and sedimentation would be minimized through the utilization of appropriate Best Management Practices and containment devices, such as silt fences and turbidity curtains. Appropriate erosion and sediment control plans, in conformance with the Connecticut Guidelines for Soil Erosion and Sediment Control (CTDEP Bulletin 34), will be prepared as part of the construction plans prior to construction for review and approval by appropriate regulatory agencies.
3. *Effect on natural land resources and formations, including coastal and inland wetlands, and the maintenance of in-stream flows* - Coastal resources in the vicinity of the relocated portion of Main Street (Route 113) and proposed RSA include tidal wetlands as well as coastal flood hazard areas. Tidal wetlands in the project area were formally delineated, surveyed, and mapped for this proposed project. Detailed investigations and surveys have been conducted to gain a better understanding of the exact tidal wetland vegetation impacts and the need for and type of mitigation required. Work associated with the proposed activities at the Airport would be partially located within regulated resource areas including vegetated tidal wetlands and . Based on the anticipated impacts, Federal and state permits and approvals will be required.
4. *Disruption or alteration of an historic, archaeological, cultural, or recreational building, object, district, site or its surroundings* – Within the project area, there are no public parks and

recreation areas, wildlife and waterfowl refuges and management areas of national, state, or local significance, as well as historic sites of state and local significance that are on or have been determined to be eligible for listing in the National Register of Historic Places. There are no historic, architectural, archaeological, or cultural resources within the project area. In a letter dated May 1, 2013, the State Historic Preservation Office concurs with CTDOT that the Area of Potential Effects has been substantially disturbed and additional archaeological investigations are unlikely to identify intact and significant archaeological resources. Prior disturbance of the artifact bearing sediments within the site area has severely compromised the ability of the site, located within the Area of Potential Effects, to yield information important to our understanding of Native Americans. SHPO also concurs that this site is not eligible for listing in the National Register of Historic Places and that no historic properties will be affected by the project, as currently designed. SHPO believes that no further consideration of historic properties is warranted with respect to this project. Tribal consultation has been initiated by FAA.

5. *Effect on natural communities and upon critical species of animal or plant and their habitats; interference with the movement of any resident or migratory fish or wildlife species -*
According to the DEEP Natural Diversity Data Base, numerous records of populations of species listed by the State, pursuant to section 26-306 of the CGS, as endangered, threatened or special concern are within the vicinity of the Airport. DEEP previously participated in NEPA review for this project, including the reevaluation of the Environmental Impact Statement undertaken in 2010. Subsequent to NEPA review, site surveys for listed species were conducted. Specifically, an avian survey, invertebrate survey and a vegetative survey were completed. Several listed species were identified on site and potential impacts and mitigation for these species are presented in an Incidental Taking Report which has been prepared and submitted to DEEP. These impacts have been deemed unavoidable. Listed species identified in the surveys include a population of the State endangered Saltpond grass (*Leptochloa fusca* ssp. *fascicularis*) along Route 113. The project will result in an incidental taking of this species. CTDOT is developing a mitigation plan to ensure that the project does not appreciably reduce the likelihood of survival and recovery of the species. Upon approval of the mitigation plan, the DEEP Wildlife Division will then submit a statement to the Office of Policy & Management, for their approval, documenting the basis for the determination of the incidental taking pursuant to section 26-310(d) of the Connecticut General Statutes.
6. *Use of pesticides, toxic or hazardous materials or any other substance in such quantities as to create extensive detrimental environmental impact -* No negative impacts are anticipated. A portion of Operable Unit 6 of the Raymark Industries, Inc. Superfund Site has been documented in areas that will be impacted by the proposed project construction. Superfund refers to those sites listed on the Environmental Protection Agency's (EPA) National Priority List (NPL) of Hazardous Waste Sites developed in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The presence of the Superfund Site has necessitated extensive testing to delineate the limits of the Raymark Waste and the

development of a Removal Work Plan documenting the means and methods for removing the waste in a manner intended to protect both the environment and the public.

Controls to prevent releases of the waste during the removal action include keeping the waste adequately wet during removal, performing certain activities in an enclosed area, decontaminating trucks and other equipment before they leave the site and air monitoring to verify effectiveness of controls. All testing and work plans are subject to review and approval by EPA before any work can begin and the removal work will be subject to direct oversight by EPA.

7. *Substantial aesthetic or visual effects* - No negative impacts are anticipated.
8. *Inconsistency with the written and/or mapped policies of the Statewide Plan of Conservation and Development and such other plans and policies developed or coordinated by the Office of Policy and Management or other agency* – No negative impacts are anticipated. The proposed project is located in an area of the State listed as a Conservation Area as depicted in the Conservation and Development Policies Plan for Connecticut 2005-2010 Locational Guide Map. Conservation Area lands provides the state with its best opportunity to provide for the state's future need for food, fiber, water and other resources. It is the state's policy to plan and manage, for the long-term public benefit, the lands contributing to the state's need for food, fiber, water and other resources, open space, recreation, and environmental quality and ensure that changes in use are compatible with the identified conservation values. This project is a safety related project and will not change the existing land use of the surrounding area.
9. *Disruption or division of an established community or inconsistency with adopted municipal and regional plans* - No negative impacts are anticipated. The compatibility of existing and planned land uses in the vicinity of an airport is usually associated with the extent of the airport's noise impacts and the potential for disruption of communities, relocation as a result of property acquisition, and induced socioeconomic impacts. As noted above, the proposed improvements would not result in a change in noise exposure and there would be no disruption of communities, relocation as a result of property acquisition, and induced socioeconomic impacts. The proposed action is consistent with the existing plans of public agencies authorized by the state in the area in which the airport is located. The proposed project is also consistent with comprehensive plans that have been adopted by municipalities in the vicinity of the airport. The proposed project is also included in the Greater Bridgeport Regional Planning Agency, April 2011, draft report entitled "Regional Transportation Plan for the Greater Bridgeport Planning Region 2011 - 2040". It can be concluded that the proposed improvements would be compatible with existing and proposed land uses and would be consistent with local plans.
10. *Displacement or addition of substantial numbers of people* - No negative impacts are anticipated. The Census Block Group in which the Airport and proposed project area are located is not considered to be low-income areas. Thus, no impacts would result to minority and/or low income populations.

11. *Substantial increase in congestion (traffic, recreational, other)* - No negative impacts are anticipated. Temporary detours will be required during construction.
12. *A substantial increase in the type or rate of energy use as a direct or indirect result of this action* - No negative impacts are anticipated.
13. *The creation of a hazard to human health or safety* - No negative impacts are anticipated. A portion of Operable Unit 6 of the Raymark Industries, Inc. Superfund Site has been documented in areas that will be impacted by the proposed project construction. Superfund refers to those sites listed on the Environmental Protection Agency's (EPA) National Priority List (NPL) of Hazardous Waste Sites developed in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The presence of the Superfund Site has necessitated extensive testing to delineate the limits of the Raymark Waste and the development of a Removal Work Plan documenting the means and methods for removing the waste in a manner intended to protect both the environment and the public. Controls to prevent releases of the waste during the removal action include keeping the waste adequately wet during removal, performing certain activities in an enclosed area, decontaminating trucks and other equipment before they leave the site and air monitoring to verify effectiveness of controls. All testing and work plans are subject to review and approval by EPA before any work can begin and the removal work will be subject to direct oversight by EPA. It should be noted that the primary purpose for the proposed improvements is to provide, to the extent practicable, RSAs on Runway 6-24 which meet current FAA minimum safety standards. On April 27, 1994, a twin-engine charter aircraft overshot Runway 6-24 at BDR in instrument conditions and struck the blast fence at the northeast end of Runway 6-24. Eight passengers were killed. The National Transportation Safety Board stated that 'the fatalities were caused by the presence of the non-frangible blast fence and the absence of a safety area at the end of the runway.'
14. *Any other substantial impact on natural, cultural, recreational or scenic resources* - No negative impacts are anticipated.

The following are issues identified by various State agencies:

DEEP previously participated in NEPA review for this project, including the reevaluation of the Environmental Impact Statement undertaken in 2010. Subsequent to NEPA review, site surveys identified a population of the State endangered **Saltpond grass (*Leptochloa fusca ssp. fascicularis*)** along Route 113. The project will result in an incidental taking of this species. CTDOT is developing a mitigation plan to ensure that the project does not appreciably reduce the likelihood of survival and recovery of the species. Upon approval of the mitigation plan, the DEEP Wildlife Division will then submit a statement to the Office of Policy & Management, for their approval, documenting the basis for the determination of the incidental taking pursuant to section 26-310(d) of the Connecticut General Statutes.

Conclusion:

This project was subject to previous environmental studies, including a Draft Environmental Impact Statement (DEIS)/Environmental Impact Evaluation (EIE). A public hearing on the Draft EIS/EIE was held on June 30, 1998 and a Final Environmental Impact Statement (FEIS) was published in May, 1999 and a Record of Decision (ROD) was issued by the FAA on October 5, 1999. The proposed improvements were included on the (then) current Airport Layout Plan, dated 1995. The proposed improvements contained in the ROD included a shift of Runway 6-24 700 feet to the northeast; construction of a 1,000-foot RSA for Runway 24; construction of an 800-foot RSA for Runway 6; relocation of Main Street (Route 113); installation of a Medium Intensity Approach Light System with Sequenced Flashing Lights; and rehabilitation of pavement of Runway 6-24.

Given the advancement in EMAS technology, a revised RSA Determination was issued on February 5, 2009 by the FAA in accordance with FAA Order 5200.8. The FAA recognized that EMAS technology has now improved and would be warranted for study at BDR. The FAA also recognized that the Final EIS did not include the removal of the non-frangible blast fence. Based on FAA Advisory Circular 150/5300-13, Airport Design, the blast velocity of the business jets using BDR would not warrant the existence of the fence and thus, it could be removed. The revised RSA Determination recommended the construction of a 300-foot safety area on the Runway 24 end with EMAS and the removal of the blast fence. Thus, a Written Reevaluation of the Final EIS was prepared to assist the FAA in evaluating the potential environmental effects resulting from the newly proposed design for the RSA upgrades to Runway 6-24 at BDR.

The FAA conducted public outreach to obtain information relevant to the changes proposed in the Written Re-evaluation from interested parties including state, federal, and local agencies, communities and the public. A notice of availability for the draft document was published in the Federal Register on September 14, 2010. A notice was published in the local newspaper on September 12, 2010. Previous commenters on the 1999 EIS were notified by mail of the release of the Written Re-evaluation. The FAA conducted a public hearing on September 22, 2010. The FAA and City of Bridgeport engaged in coordination with various local, state and federal agencies throughout the process. Information related to the Proposed Project was available through public notifications and the City of Bridgeport website. Relatively few comments were received on the draft Re-Evaluation, reflecting the limited scope of the project. A total of twelve comment letters were received from the public. In addition, a total of twenty-nine individuals spoke at the public hearing held on September 22, 2010.

A notice of availability for the final Written Re-evaluation was published in the Federal Register on July 19, 2011. Copies of the final Written Re-evaluation were made available at the Bridgeport and Stratford Libraries and were distributed to persons and agencies who commented on the Draft Re-Evaluation document. The Final Written Re-evaluation was published in June 2011.

For the purpose of complying with the Connecticut Environmental Policy Act (Sections 22a-1 through 22a-1h of the Connecticut General Statutes), a Scoping Notice was published in the Environmental Monitor on March 19, 2013 and a Public Scoping Meeting was held April 3, 2013. Collectively, these processes enabled the public to submit comments on the nature and extent of any environmental impacts of the proposed action during the thirty days following the publication of the notice. The comment period closed on April 18, 2013. The meeting was attended by approximately 75 members of

the public and a total of 16 individuals provided oral comment at that time. In addition, two written comments were received by the public. The majority of comments received centered on the issue of flooding along Route 113 and were addressed at the hearing and also in this assessment. Written comments were also received by two state agencies, the Department of Energy and Environmental Protection and the Department of Public Health. The CTDOT has taken these comments into consideration and has concluded that, given the extensive public involvement in the preparation of the environmental analyses conducted to date, no further analysis would be beneficial to the public interest and the preparation of an Environmental Impact Evaluation will not be prepared for this project.