OFFICE OF ADJUDICATIONS

IN THE MATTER OF	***:***	***APPLICATION NOS. 200003049-KZ, DIV-200003052, IW-2000-116, WQC-200003051, 200600317***
TWEED-NEW HAVEN AIRPORT AUTHORITY	***:***	***MARCH 30, 2007***

PROPOSED FINAL DECISION

I
SUMMARY

The Tweed-New Haven Airport Authority (the applicant) has applied to the Department of Environmental Protection for various permits[1] to conduct work at Tweed-New Haven Airport. In order to comply with Federal Aviation Administration requirements, the applicant proposes to create runway safety areas (RSAs) at each end of Runway 2/20 and to extend and rehabilitate Taxiway B. As a result of these activities and to compensate for unavoidable environmental impacts, the applicant would implement a plan to restore and enhance tidal wetlands.

The DEP issued a tentative determination to approve these permit applications and staff has prepared draft permits that would authorize the proposed activities. (Attachments B, C, D.) A hearing was held in New Haven on December 6, 2006 for the receipt of public comment; the hearing was continued at the DEP in Hartford on December 12, 13 and 18. The parties to this proceeding are the applicant, DEP staff, and an intervening party, East Shore Conservation Association, Inc. (formerly East Haven/New Haven Committee for the Protection of Property Rights, Inc.), represented by its Chairman Michael Criscuolo.

On February 22, 2007, the applicant and DEP staff jointly filed proposed findings of fact and conclusions of law pursuant to the DEP Rules of Practice. Regs., Conn. State Agencies

[1] Application #200003049: *Structures, Dredging and Fill, Tidal Wetlands and Coastal 401 Water Quality Certification;* Application #DIV-200003052: *Diversion of Water*; Application #IW-2000-116: *Inland Wetlands and Watercourses*; Application #WQC-200003051 *Inland 410 Water Quality Certification*; and Application #200600317: *National Pollutant Discharge Elimination System Permit (NPDES).*

§22a-3a-6(x). (Attachment A.)[2] I have reviewed this submission and the administrative record, including documentary evidence and testimony presented during the hearing by the parties; I have also considered public comments and information presented before, at, or after the hearing.[3]

Following this review of the record and consideration of the facts and relevant law in this matter, I find that the applications comply with the applicable statutes and relevant provisions of the implementing regulations. General Statutes §§22a-28 through 22a-45; §22a-361, §22a-369, §22a-380; §§22a-416 through 22a-438; Regs., Conn. State Agencies §§22a-30-1 through 22a-30-17, §§22a-39-1 through 22a-39-15, §§22a-430-1 through 22a-430-7. Furthermore, I find that the parties' submission, as supplemented herein, satisfactorily conveys the factual findings and legal conclusions necessary to support my conclusion. I therefore adopt these findings of fact and conclusions of law, as supplemented herein, as part of my proposed final decision.

If the regulated activities are conducted as proposed, adverse environmental impacts will be minimized to the greatest extent practicable while still allowing the applicant to meet the mandated goal of enhancing safety at the airport. The planned wetland mitigation and restoration program will compensate for unavoidable wetland impacts associated with this project.

I therefore recommend issuance of all the draft permits, subject to the prerequisites and conditions set out below.

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[2] The intervening party filed no post-hearing document.

[3] Public comments are part of the administrative record; relevant issues raised by the public were addressed at the hearing and are reflected in this decision. (Exs. APP- 129; DEP-22-27.)

II
DECISION
A
FINDINGS OF FACT
(1)

The following lettered paragraphs supplement the attached proposed findings offered by the applicant and DEP staff.

The Parties

a. The applicant presented the following witnesses: John Silva, Environmental Programs Manager, Federal Aviation Administration (FAA), New England Region; Richard Lamport, Airport Manager, Tweed-New Haven Airport; Richard Domas, Vice-President, Senior Project Manager, Hoyle, Tanner and Associates; Robert Furey, Director of Aviation Services, Hoyle, Tanner and Associates; Marshall Dennis, Principal, Wetlands & Wildlife, Inc.; Mark LeMoine, Associate, Fuss & O'Neill; and Michael Angieri, Consulting Engineer, formerly with Hoyle, Tanner and Associates. (Exs. APP- 106, 108, 112-115, 122; test. 12/12/06, J. Silva, pp. 30-76, R. Lamport, pp. 77-104, R. Domas, pp.105-173; 12/13/06, R. Domas, pp.10-64, 70-74, R. Furey, pp.75-117, 140-175, M. Dennis, pp.178-206, M. LeMoine, pp.209-218; 12/18/06, M. Angieri, pp. 26-41.)

b. The primary interest of the FAA in airport development is to enhance safety; the agency also has a role in environmental impact assessment. Hoyle, Tanner and Associates, involved in early conceptual designs, prepared the Environmental Impact Statement and Environmental Impact Evaluation (EIS/EIE), developed the final design of the project, and prepared certain permit applications. Wetlands & Wildlife, Inc., an environmental consulting and planning firm, delineated wetlands, prepared assessments of wetlands values and functions and evaluated wildlife habitats. The firm was also involved in mitigation planning and design. Fuss & O'Neill, a consulting engineering firm, performed soil assessments and assisted with certain aspects of the NPDES permit. (Test. 12/12/06, J. Silva, pp. 31- 34, R. Lamport, pp. 77-78, R. Domas, pp. 105-107; 12/13/06, pp. 179- 180; M. LeMoine, pp. 210-211.)

c. The following staff members, who participated in the review and tentative approval of the permit applications, testified on behalf of the DEP: Kevin Zawoy, Office of Long Island Sound Programs; Brian Golembiewski and Sharon Yurasevecz, Inland Water Resources Division; and Karen Allen, Water Permitting & Enforcement Division. (Exs. DEP- 1, 29, 31, 43; test. 12/18/06, K. Zawoy, pp. 43-127, B. Golembiewski, pp. 127-137, S. Yurasevecz, pp. 137-150, K. Allen, pp. 150-160.)

d. No witnesses testified for the intervening party East Shore Conservation Association, Inc. Michael Criscuolo, its Chairman, did cross-examine various witnesses and participated in the proceeding. (Tr. M. Criscuolo, 12/12/06, pp. 65-74, 97-102, 151-152; 12/13/06, pp. 41-54, 198-201; 12/18/06, pp. 39-41, 105-110, 161-162, 164-168.)

(2)

The following findings supplement specific proposed findings of fact submitted by the applicant and DEP staff. Italicized notations correct apparent typographical errors. The numbered paragraphs correspond to the proposed findings of fact as they are numbered in Attachment A. (Note: To the extent that any of the proposed findings refer to existing permit conditions, the citations should include Exs. DEP- 32, 39a, and 46a.)

I. The Applicant and Existing Site Conditions

1a. The proposed activities would take place on Airport property. (Exh. APP-40.)

II. Project Purpose and Need

11a. If paving of the proposed RSAs was ever considered, an additional EIS/EIE and federal and state permits would be necessary. The applicable draft permit also provides that the surfaces of the RSAs cannot be modified without a full permit from the DEP. In addition, paving an RSA would essentially extend the paved runway, extending the need for an RSA threshold by another 1000 feet, a result not contemplated in the EIS/EIE for this project. (Ex. DEP-46a; test. J. Silva, 12/12/06, pp. 39-40, 12/13/06, R. Domas, pp. 16-17; 12/18/06, K. Zawoy, pp. 96-97.)

15. See Silva Testimony, 12/12 Trans. at 41-41, *Lamport Testimony, 12/12 Trans. at 88*-90; Domas Testimony 12/12 Trans. at 113-114; Exhs. APP-131, 136/2.

III. Proposed Regulated Activities

D. Wetland Restoration/Enhancement Plan

33a. To make sure the tide gates will be maintained and monitored in the event the applicant is no longer operating the airport, the draft permit requires a Memorandum of Understanding between the applicant and the City of New Haven that establishes an agreement between them concerning the construction, operations and on-going maintenance of the tide gate structure and related appurtenances. Issues such as ownership and long-term responsibility for the gates will also be determined in the agreement. (Ex. DEP-46a, Condition 18; test. 12/13/06, R. Domas, pp. 47-48; 12/18/06, K. Zawoy, pp. 97-98.)

37a. Changes in overall sea levels would not affect the maintenance of the typical water surface elevation. Despite any elevated sea levels, only enough water would be allowed to come through the tide gate system to flood to levels of 3.5 NGVD. (Test. 12/13/06, R. Domas, p. 34.)

IV. Alternatives Analysis

D. Modified DEP Alternative

53, 54. See Domas Testimony, 12/*13* Trans. at 17-21.

E. EMAS

57. See *Silva* Testimony, 12/12 Trans. at 52, *Domas Testimony*, 12/13 Trans. at 38.

58. See *Silva* Testimony, 12/12 Trans. at 52.

62. See Silva Testimony, 12/12 Trans. at 48, *49*. Exh. APP-80.

V. The Applications: Satisfaction of Statutory and Regulatory Criteria

A. Programs Administered by the Office of Long Island Sound Programs

114. Exh. APP-137.

B. Programs Administered by the Inland Water Resources Division

135. Exhs. DEP-20, 28, *APP*-58.

156a. Public Act 05-205 deleted reference to compatibility with the State Plan as a criterion for diversion permits. Exhs. APP-132*A*, 73. See Golembiewski Testimony, 12/18 Trans. at 134-136.

158. Exh. APP-*132*.

162. See Dennis Testimony, 12/13 Trans. at 194-195.

163. The applicant will prepare and submit a restoration plan including these activities as a condition of the permit. See Domas Testimony, 12/13 Trans. at 57, 62-64.

C. NPDES Application

185. Exh. DEP-*48*.

VII. Public Participation

201. Exh. *DEP*-20.

205.

d. The Town of East Haven commented during the hearing that the applicant must obtain certain approvals from its inland wetlands commission for this project. This question is outside the scope of my jurisdiction in this case. However, permits issued by the DEP provide that nothing in that permit shall relieve the permittee of other obligations, including approvals required under applicable federal, state and local law. This provision is included in the draft permits for this project. (Exs. DEP- 32, 39a, 46a; test. 12/13/06, M. Ricozzi, pp. 120-122.)

B

CONCLUSIONS OF LAW

The following conclusions supplement those offered by the applicant and DEP. The numbered paragraphs reflect those in the attached proposed conclusions of law.

1a. Although any subsequent phases of the Airport Master Plan or associated activities are beyond the scope of my jurisdiction in rendering a decision on the applications that are the subject of this proceeding, I am obliged to consider the economic aspects of the project. The policy of the Coastal Management Act (CMA) provides that the development of coastal land and water resources must be consistent with the capability of those resources to support development "without significantly disrupting either the natural environment *or sound economic growth*". (Emphasis added.) General Statutes §22a-92(a)(1). In addition to this general policy, the CMA provides that in carrying out its responsibilities, the DEP must "make use of rehabilitation, upgrading and improvement of *existing* transportation facilities as the primary means of meeting transportation needs in the coastal area." (Emphasis added.) §22a-92(b)(1)(F).[4]

1b. The DEP is not required to conduct a review for consistency with the State Plan of Conservation and Development as part of its review of these applications. General Statutes §16a-31. Part of the agency's exercise of its daily and routine regulatory authority, application review and permit issuance is not an agency action as outlined in §16-31 (a) through (e). Given the plain language of the statute, it is clear that the legislature did not contemplate such routine activities to be subject to the Plan's requirements. See *State v. Bennett-Gibson*, 84 Conn. App 48, 67 (2004) (when construing a statute, use common sense and follow plain meaning of language; assume legislature intended to accomplish reasonable and rational result).

[4] The record reflects comments by several public speakers at the December 6, 2006 hearing in New Haven regarding the beneficial impact of the airport on the region's economy; written comments on this topic were also received and are in the record. While any future expansion of the airport is not within my authority to consider, I recognize these safety improvements to Tweed will impact its status as a source of transportation for the region. As per the policies set out in the CMA, it is therefore necessary to protect vital environmental assets without significantly impacting the economic role played by the airport.

III

CONCLUSION

The proposed activities outlined in the applications that were the subject of this hearing are consistent with all applicable statutory and regulatory requirements, standards and policies. General Statutes §§22a-28 through 22a-45; §22a-361, §22a-369, §22a-380; §§22a-416 through 22a-438; Regs., Conn. State Agencies §§22a-30-1 through 22a-30-17, §§22a-39-1 through 22a-39-15, §§22a-430-1 through 22a-430-7. Adverse environmental impacts have been minimized to the greatest extent practicable while still allowing the applicant to accomplish the objective of enhancing safety at the airport. To compensate for unavoidable impacts, the applicant has proposed an extensive wetland restoration program, to be monitored by the DEP, which would restore approximately fifty-six acres of degraded tidal wetlands, enhancing their ecological and habitat value and re-creating the natural salt marsh environment.

The proposed activities would not result in increased flood potential in the surrounding area. Available flood storage would be increased as a result of the project and new tide gates and a sensor system would provide for control of floodwater elevations associated with coastal and inland storm events.

The intervening party did not demonstrate that the project would have, or is reasonably likely to have, the effect of unreasonably polluting, impairing or destroying the public trust in the air, water or other natural resources of the state. General Statutes §22a-19(a).

Although I am therefore not obliged to consider whether there are alternatives to the proposed activities, it is clear that the applicant did identify and assess numerous alternatives to the proposed activities and an alternative proposed by the DEP, the use of an Engineered Materials Arresting System (EMAS). There is more than sufficient evidence in the record that none these alternatives, including EMAS, were found to be feasible or prudent.

IV
RECOMMENDATION

The draft permits should be issued, with two permits subject to the following conditions.

As to the inland wetlands permit (Attachment C), the final permit should include a condition that incorporates the agreement set out in proposed Finding of Fact #163 (Attachment A), regarding the restoration of Pig Farm Road to ensure that existing elevations are achieved and maintained post-construction.

Regarding the discharge (NPDES) permit (Attachment D), DEP staff should be authorized to require that the applicant to submit detailed plans and specifications for the proposed erosion and sedimentation controls to treat the discharges. Once such plans are approved by the DEP, that draft permit should be finalized and issued to the applicant.

_/s/ Janice B. Deshais_____

Janice B. Deshais, Director
Hearing Officer

ATTACHMENT A

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF ADJUDICATIONS

IN THE MATTER OF	:	APPLICATION NOS.
	:	200003049, DIV-200003052
	:	WQC-200003051, 200600317,
	:	IW-2000-116
TWEED-NEW HAVEN	:	
AIRPORT AUTHORITY	:	FEBRUARY 22, 2007

DEPARTMENT OF ENVIRONMENTAL PROTECTION AND APPLICANT TWEED-NEW HAVEN AIRPORT AUTHORITY'S JOINT PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

Pursuant to the Post Hearing Briefing Schedule issued by the hearing officer on January 4, 2007, the Department of Environmental Protection ("DEP") and Tweed-New Haven Airport Authority ("Applicant") hereby jointly file Proposed Findings of Fact and Conclusions of Law in the above-captioned proceeding as follows:

PROPOSED FINDINGS OF FACT

I. The Applicant and Existing Site Conditions

1. The Applicant is the lessee of property located at 155 Burr Street in New Haven, Connecticut known as the Tweed-New Haven Airport ("Airport" or "Site"). See Exhibit ("Exh.") APP-40. The property is owned by the City of New Haven and leased to the Applicant pursuant to the terms of a Lease and Operating Agreement, dated May 30, 1998. See Exh. APP-137. The City of New Haven is both aware of and supports the activities proposed in the above-captioned permit applications. See Exh. APP-138.

2. The Site is situated in both the Town of East Haven and the City of New Haven in a highly developed area that contains industrial, commercial, single- and multi-family residences, schools and utilities. The East Haven Industrial Park abuts the Site to the southeast and Lighthouse Point Park recreational area/wildlife refuge lies to the southwest. To the north and west of the Site are residential areas and to the east is Robinson Aviation, a general aviation facility and Fixed Base Operation. Undeveloped areas surrounding the Site include inland wetlands, tidal wetlands, coastal waters, drainage channels and isolated knolls. See Exhs. APP-40, 131.

3. The Site consists of numerous structures, including an airport terminal building and related operational structures, main Runway 2/20, which runs north/south on the Site, crosswind Runway 14/32, which runs northwest/southwest, and a number of taxiways, including

Taxiway B, which runs parallel to Runway 2/20 towards the Runway 2 (south) end. The municipal boundary runs approximately down the center of Runway 2/20, with East Haven to the east and New Haven to the west. Present on the Site is a watercourse referred to as Tuttle Brook in the East Haven portion of the Site and Morris Creek in the New Haven portion. Morris Creek/Tuttle Brook flows from the northern portion of the property near Holmes Street southerly to Morris Cove (off-Airport). See Exhs. APP-40, 131.

4. At the Runway 2 end, Morris Creek/Tuttle Brook runs perpendicular to Runway 2/20, flows under South End Road Bridge, through tide gates located off of Cart Road and into Morris Cove. From the end of the Runway south to the creekbed is a clear, level area measuring approximately 250 feet long and 495 feet wide. Beyond Morris Creek/Tuttle Brook, further to the south, is a degraded wetland area consisting primarily of *Phragmites australis* (common reed), an invasive weedy species of limited value to wildlife that is generally associated with a degraded wetland environment. In undisturbed conditions, *Phragmites* predominates a wetland habitat to the exclusion of other plant species. See Testimony of Richard K. Domas ("Domas Testimony"), 12/12 Trans. at 127-29; Testimony of Marshall Dennis ("Dennis Testimony"), 12/13 Trans. at 181; Testimony of Kevin Zawoy ("Zawoy Testimony"), 12/18 Trans. at 52-53; Testimony of John Silva ("Silva Testimony"), 12/12 Trans. at 50-51; Exhs. APP-131, 136/6.

5. At the Runway 20 (north) end, there is an approximately 250 foot long clear inclining area before Dodge Avenue to the north, a local two-lane road that runs perpendicular to Runway 2/20. Morris Creek/Tuttle Brook runs diagonally through this area to the north of the Runway end. See Domas Testimony, 12/12 Trans. at 112-13, 160; Silva Testimony, 12/12 Trans. at 41-42; Exhs. APP-131, 136/2.

6. Taxiway B is a partial parallel taxiway that currently does not run to the end of Runway 2 but ends some 850 feet short of the Runway threshold. The surface of Taxiway B is in an advanced state of deterioration and has many cracks and depressions. The distance from the centerline of Runway 2/20 to the centerline of Taxiway B varies, reaching approximately 275 feet as it turns to intersect the Runway, which is less than the Federal Aviation Administration's ("FAA") 400 foot separation standard for the Airport Reference Code established for the Airport. See Silva Testimony, 12/12 Trans. at 34-36; APP-5. Due to its degraded condition, Taxiway B currently has a weight limitation of 75,000 pounds, meaning that only aircraft weighing that amount or less can utilize the taxiway. See Testimony of Richard Lamport ("Lamport Testimony"), 12/12 Trans. at 79; Domas Testimony, 12/12 Trans. at 124-25; Exhs. APP-131, 136/4.

7. The degraded condition of the wetland area off the Runway 2 end was caused by the installation of tide gates off of Cart Road in the 1930s as a means to control the salt marsh mosquito. Prior to the construction of the tide gates, the wetland area was dominated by *Spartina alternaflora* and *Spartina patens*, both classic tidal wetland plant species. The tide gate structure, which consists of a series of flap gates that allow the downstream flow of water from the wetland area and prevents upstream tidal flow, prevented saltwater from inundating the area, causing the *Spartina* grasses to die. *Phragmites*, which tolerates low salinity, eventually out-competed all other salt marsh plants that require high salinity levels. See Dennis Testimony,

12/13 Trans. at 181-83; Domas Testimony, 12/12 Trans. at 134-35; Silva Testimony, 12/12 Trans. at 50-51.

8. The degraded *Phragmites*-dominated wetland system that currently exists on Site is extremely limited in terms of functions and values and provides little value to wildlife. See Dennis Testimony, 12/13 Trans. at 181-84; Zawoy Testimony, 12/18 Trans. at 52-53, 62-63; Silva Testimony, 12/12 Trans. at 50-51.

II. Project Purpose and Need

9. The Airport is classified by FAA as a primary, commercial service airport in that it provides regularly scheduled passenger air service. Given this classification, the Airport is required to hold an operating certificate under FAA Regulation Part 139. See Silva Testimony, 12/12 Trans at 33.

10. FAA requires airports holding Part 139 operating certificates to comply with Part 139 standards, which standards include a requirement for "runway safety areas" acceptable to the FAA Administrator to the maximum extent practicable. In connection with the proposed Taxiway B improvements, FAA specifically required the Airport to comply with the Part 139 runway safety area requirements. See Silva Testimony, 12/12 Trans. at 38-39.

11. A runway safety area ("RSA") is an unobstructed area along the sides and at the end of a runway, the dimensions of which are determined by the type of aircraft that use the airport. For the Applicant, these dimensions are 500 feet wide by 1,000 feet long. Per FAA standards, an RSA consists of a prepared surface designed to safely accommodate an aircraft that makes an excursion from the runway. Excursions can occur upon landing during an "undershoot" – when an aircraft lands short of the runway – or an "overshoot" – for example, when an aircraft lands long and runs out of runway length before being able to stop. Excursions also can occur upon takeoff if an aircraft runs off the end of the runway because it is unable to obtain sufficient lift or is otherwise forced to abort a takeoff. In the event of an excursion, the RSA would provide a level area free of obstructions for the aircraft to roll to a safe stop without substantial damage to the aircraft or injury to passengers. An RSA also is intended to provide a clear, level area to accommodate emergency, rescue and/or fire fighting vehicles and associated activities. See Silva Testimony, 12/12 Trans. at 37-40; Domas Testimony, 12/12 Trans. at 110-12; Exh. APP-40.

12. An aircraft operating in an RSA is, by definition, experiencing an emergency and airport emergency, rescue and/or fire fighting equipment would automatically respond. See Silva Testimony, 12/12 Trans. at 41; Domas Testimony, 12/12 Trans. at 111.

13. Currently, the Airport does not have standard RSAs at either the Runway 2 or the Runway 20 end and therefore does not comply with FAA standards. See Exhs. APP-5, 40.

14. The Runway 2 end does not have a standard RSA because of the close proximity of Morris Creek/Tuttle Brook, which lies approximately 240 feet beyond the Runway threshold, and the proximity of the degraded wetlands that lay beyond the Creek/Brook to the south. If an

aircraft landed short of a Runway 2 approach or overran the Runway 20 approach, the aircraft would likely impact the riprap creekbed, causing the undercarriage to break off, puncturing fuel cells, and resulting in substantial, if not total, destruction of the aircraft and significant injury or death to passengers. Also, emergency, rescue and/or fire fighting vehicles responding to an accident in this area have no direct on-site access to the crash site and would have to proceed across the Airport, exit through an Airport security gate to Morris Causeway, travel south to Uriah Street via Morris Causeway and Townsend Avenue, regain entry to the airfield via a security gate at Uriah Street and then launch a rescue response in the marshy area. If a crash site extended into the wetland area, emergency, rescue and/or fire fighting vehicles could not access the area at all and the only response would be by foot. See Lamport Testimony, 12/12 Trans. at 84; Silva Testimony, 12/12 Trans. at 42-44; Domas Testimony, 12/12 Trans. at 127-29; Exhs. APP-5, 136/6.

15. The Runway 20 end does not have a standard RSA because of the close proximity of Dodge Avenue and Morris Creek/Tuttle Brook. Also, the land in this area is not compacted to FAA standards and could not adequately sustain the weight of an aircraft and emergency, rescue and/or fire fighting vehicles. The current physical configuration at the Runway 20 end poses a significant safety concern in the event of an aircraft excursion from the Runway because of the possibility of impact with vehicular traffic on Dodge Avenue and impact with the bank of Morris Creek/Tuttle Brook, which would cause significant damage, if not total destruction, to an aircraft. See Silva Testimony, 12/12 Trans. at 41-42, 89-90; Domas Testimony, 12/12 Trans. at 113-114; Exhs. APP-131, 136/2. Furthermore, emergency, rescue and/or fire fighting vehicles responding to portions of this area could not directly access the crash site and would have to cross the Airport, pass through two Airport security gates and travel down Dodge Avenue. See Domas Testimony, 12/12 Trans. at 117-18; Exh. APP-5.

16. FAA has stated that a standard airport consists of a runway with a parallel taxiway the full length of the corresponding runway. See Silva Testimony, 12/12 Trans. at 34-37. The intent of this guideline is to prevent the taxiing of aircraft on a runway, which is intended for takeoffs and landings. Taxiing on a runway is considered to be an inherently unsafe condition. See Domas Testimony, 12/12 Trans. at 124-25; 12/13 Trans. at 38-40.

17. Taxiway B currently is only a partial parallel taxiway and does not extend to the end of Runway 2. Also, because of the deteriorated taxiway surface condition, Taxiway B is weight restricted to aircraft weighing under 75,000 pounds, meaning that aircraft above this weight have to back-taxi along the main Runway, turn around at the Runway 2 end and takeoff. Backtaxiing on the main Runway is not considered to be a safe operating condition. See Domas Testimony, 12/12 Trans. at 124-25; Exh. APP-136/4. Back taxiing on Runway 2/20 is especially dangerous at night when the Airport's air traffic control tower (which controls aircraft ground movements, takeoffs and landings) is closed and aircraft must communicate with each other by radio in order to prevent taxiing aircraft and landing aircraft from occupying Runway 2/20 at the same time. See Domas Testimony, 12/13 Trans at 38-40. Furthermore, when aircraft are forced to idle while waiting for Runway 2/20 to be clear of takeoff and landing activities, they burn fuel and cause unnecessary air emissions. See Lamport Testimony, 12/12 Trans. at 80.

18. FAA considers the Taxiway B extension and rehabilitation to be a safety project. See Silva Testimony, 12/12 Trans. at 34-36.

19. Through the permit applications, the Applicant proposes to enhance safety margins at the Airport by addressing the lack of standard RSAs on the Runway 2 and Runway 20 ends and the lack of a full parallel taxiway to the end of Runway 2. The project is not intended to and will not allow larger aircraft to use the airport, nor is it intended to otherwise provide any increase in annual operations. See Lamport Testimony, 12/12 Trans. at 97-98; Exh. APP-40.

20. FAA is prepared to fund approximately 95% of the project cost. FAA plans to allocate discretionary funds for the project and has established a deadline of May 1, 2007, for all discretionary funding requests. If FAA does not receive the Authority's funding application by May 1, FAA will reprogram the funding currently earmarked for the project. See Silva Testimony, 12/12 Trans. at 58-60.

21. In recent legislation, the United State Congress required that FAA address all RSA improvements at Part 139 airports, including Tweed, by the year 2015 – meaning that by 2015, all Part 139 airports must be in compliance with RSA requirements to the extent practical. If the Airport does not comply with all regulations by then, FAA could initiate an administrative proceeding to withdraw the Airport's operating certificate and eventually close the Airport. See Silva Testimony, 12/12 Trans. at 67, 75.

III. Proposed Regulated Activities

A. Runway 20

22. At the Runway 20 end, the Applicant proposes to construct a modified standard RSA, measuring 500 feet by 1,000 feet (950 feet in the northeast corner). To accommodate the RSA, the Applicant proposes to relocate part of Dodge Avenue outside of the new RSA footprint but still inside Airport property. The new Dodge Avenue will be connected to Burr Street in a configuration suggested by municipal engineers. In addition, Morris Creek/Tuttle Brook will be relocated to an alignment incorporating a series of curves and meanders to mimic a natural creek channel, as specifically requested by DEP. Approximately 584 feet of Morris Creek/Tuttle Brook will be placed in a culvert running beneath the RSA. The cross-section of the new Morris Creek/Tuttle Brook will be wider than existing conditions, resulting in a net increase in coastal waters. See Domas Testimony, 12/12 Trans. at 119-21; Zawoy Testimony, 12/18 Trans. at 46; Testimony of Brian Golembiewski ("Golembiewski Testimony"), 12/18 Trans. at 133-34; Exh. APP-136/6.

23. The Runway 20 RSA construction will result in the following impacts:

Permanent Impacts:

- Coastal waters filled: .92 acres

Resource Creation

- Upland to new coastal waters: 1.79 acres

Temporary Construction Impacts:

- Coastal waters filled: .17 acres (will be converted back after construction)

See Domas Testimony, 12/12 Trans. at 122; Exh. APP-40.

24. The Runway 20 RSA construction will result in a net increase in coastal waters of .87 acres. See Domas Testimony, 12/12 Trans. at 121-22; Golembiewski Testimony, 12/18 Trans. at 134.

B. Taxiway B

25. With respect to Taxiway B, the underlying asphalt will be removed, ground-up and reused elsewhere on Site and the existing taxiway base will be pulled-up and regraded. A new asphalt taxiway wearing surface will be laid upon the regraded taxiway base. The Taxiway also will be extended approximately 850 feet southward to the end of Runway 2. Although FAA recommends a separation of 400 feet from runway centerline to taxiway centerline, this distance would result in unacceptable environmental impacts and, to avoid these impacts, FAA determined that 275 feet would be an adequate separation and is prepared to issue a modification to standard. See Domas Testimony, 12/12 Trans. at 125-27; Silva Testimony, 12/12 Trans. at 35-36.

26. The Taxiway B improvement will result in the following impacts:

Permanent Impacts:

- Coastal waters filled: .17 acres
- Inland wetlands filled: .02 acres
- Tidal wetlands filled: .67 acres

Resource Conversion:

- Tidal wetlands to coastal waters: .18 acres

Temporary Construction Impacts:

- Inland wetlands filled: .66 acres (will be converted back after construction)
- Tidal wetlands filled: .29 acres (will be converted back after construction)

See Domas Testimony, 12/12 Trans. at 127; Exh. APP-40.

C. Runway 2

27. At the Runway 2 end, the Applicant proposes to construct a standard RSA of 500 feet by 1,000 feet. To accommodate the RSA, sections of Morris Creek/Tuttle Brook will be filled and rechanneled. The new channel will consist of a meandering alignment more akin to a natural creekbed, with the banks widened in areas to form pools and still waters. See Domas Testimony, 12/12 Trans. at 129-33.

28. The Runway 2 RSA construction will result in the following impacts:

Permanent Impacts:

- Coastal waters filled: .50 acres
- Inland wetlands filled: .17 acres
- Tidal wetlands filled: 9.41 acres

Resource Conversion

- Coastal wasters to coastal waters: .11 acres
- Coastal waters to tidal wetlands: .2 acres
- Inland wetlands to coastal waters: .05 acres
- Tidal wetlands to coastal waters: 1.48 acres
- Tidal wetlands to inland wetlands: .27 acres

Restoration/Creation

- Degraded tidal wetlands restored: 2.85 acres
- Upland to coastal waters: 1.87 acres
- Upland to tidal wetlands: .54 acres

Temporary Construction Impacts

- Coastal waters to coastal waters: .42 acres (will be converted back after construction)

See Domas Testimony, 12/12 Trans. at 129-33; Exhs. APP-136/7, 40, 42.

D. Wetland Restoration / Enhancement Plan

29. To compensate for the unavoidable environmental impacts associated with the RSA construction and Taxiway B improvements, the Applicant proposes a wetland restoration plan by which it will restore approximately 56 acres of degraded tidal wetlands. The restoration plan consists of three main parts: (1) modifying the existing tide gate structure to allow for tidal waters to inundate the restoration areas to an elevation of 3.5 feet NGVD; (2) installing and enhancing tidal creeks and channels at two sites (an area adjacent to Dean Street and the other adjacent to Ora Avenue and east of Taxiway B to allow better tidal flow to the far reaches of the restoration area; and (3) removing *Phragmites* vegetation within the restoration area. See Domas Testimony, 12/12 Trans at 133-36; 12/13 Trans. at 31; Exhs. APP-136/8, 90, DEP-13.

30. The *Phragmites* vegetation will be sprayed with a herbicide, which will be uptaken by the plant, enter into the plant's root system and ultimately kill the plant from the bottom up. The *Phragmites* will then be mulched with specialized wetland-compatible machinery that can operate without damaging the wetlands. The herbicide to be used, which is approved by the United States Environmental Protection Agency ("EPA"), will not adversely impact wildlife and is currently utilized and recommended by DEP. See Zawoy Testimony, 12/18 Trans. at 59, 75-76; Domas Testimony, 12/12 Trans. at 152; Exh. APP-90.

31. To introduce salt water into the restoration area, the Applicant will remove the existing wooden tide-gate structure and replace it with three 6 foot high by 10 foot wide gates.

Two of the gates can be opened and closed to allow upstream and downstream flow and will be motor-operated; the third will be a simple flap valve that will allow only downstream flow. See Domas Testimony, 12/12 Trans. at 134-36, 12/13 Trans. at 31; Testimony of Michael Angieri ("Angieri Testimony"), 12/18 Trans. at 29; Exhs. APP-90, 136/8, DEP-13.

32. To enhance the distribution of tidal waters to the far reaches of the restoration area, the Applicant will construct approximately 6,000 linear feet of tidal creeks and channels. In addition, the Applicant will clear several ditches in the restoration area that are currently *Phragmites*-dominated. See Dennis Testimony, 12/13 Trans. at p. 182-83; Exh. APP-90.

33. The two operable tide gates will be powered by 5-horsepower motors. In the event of a power failure, back-up power will be supplied by a diesel fired generator housed in an equipment room adjacent to the tide gate structure. The equipment room will be built on a raised pedestal above the 100 year floodplain. In the event of a total failure of primary and secondary power, the gates can be hand-cranked open or closed by Airport personnel. See Domas Testimony, 12/12 Trans. at 138-40, 12/13 Trans. at 28; Exh. APP-90.

34. Extensive hydraulic modeling was performed in conjunction with the United States Army Corps of Engineers Waterways Experiment Station in Mississippi to project water surface elevations associated with the tide gate installation and resulting upstream tidal flow. Modeling showed that the mean high tide in the restoration area would be elevation 3.5 NGVD. At this elevation, a saltwater environment can establish itself and existing stream channels would contain the water and prevent flooding in most areas; at several locations, however, berms will be constructed on Airport property to further contain the mean high tide. See Domas Testimony, 12/12 Trans. at 134-36, 12/13 Trans. at 31; Angieri Testimony, 12/18 Trans. at 28; Exhs. APP-90, 136/8.

35. Hydraulic modeling also showed that there is a low-lying section along Dean Street where a one-year high tide (4.2 NGVD) would overflow the existing stream bed and potentially flood portions of Dean Street. To prevent flooding and to maintain a 3.5 NGVD water elevation, a system was developed to monitor and control water surface elevations in the restoration area. The system involves the installation of four sensors (one downstream of the tide gates, one upstream of the tide gates, one near Morris Causeway and one near Eden/Dean Streets) that will "sense" water surface elevation by measuring water pressure. The sensors will be sealed in protective encasements suitable for a saline environment and will be situated below the active water level to avoid being impacted by icing conditions See Domas Testimony, 12/12 Trans. at 136-37, 141-42; Angieri Testimony, 12/18 Trans. at 30, 33; Exh. APP-90.

36. The pressure sensor system is a reliable technology for monitoring water levels in an environment like the one proposed. The sensors proposed are a common electro-mechanical device commonly used for controlling gate opening and closing, hydraulic controls, pump controls, etc. See Angieri Testimony, 12/18 Trans. at 31, 35; Zawoy Testimony, 12/18 Trans. at 93; Exh. APP-90.

37. The system will be calibrated over time and function automatically based upon an accumulated body of knowledge. The typical water surface elevation of 3.5 NGVD will initially

be set in the computer model and, during the calibration process, the system will measure the amount of opening at the tide gates needed to attain this elevation upstream. That opening will be set in the system and the tide gates will automatically maintain the water level at 3.5 NGVD. See Domas Testimony, 12/13 Trans. at 43; Angieri Testimony, 12/18 Trans. at 30-33; Exh. APP-90.

38. If the sensors detect that too much water is moving up the Creek/Brook (volumes that could exceed 3.5 NGVD and overflow the creekbanks), the system will send a signal to the operating center at the Airport (staffed 24 hours a day) and the center would send a signal to the tide gates to neck down and not allow any further upstream tidal flow. The gates can be closed in a matter of minutes. See Domas Testimony, 12/12 Trans. at 136-37, 141-42; Angieri Testimony, 12/18 Trans. at 32-33; Exh. APP-90.

39. In storm events, the system can be overridden to allow Airport personnel to control tide gate functions. In the event of a coastal storm during which a storm surge would exceed 3.5 NGVD, the operating center can send a signal to the tide gates to neck down in advance of the surge to prevent upstream flooding. In the event of an inland storm, the operating center can, in advance of the storm, prevent tidal flow through the tide gates and thereby reduce the upstream water elevations and create increased stormwater storage capacity. Airport personnel, who monitor weather 24 hours a day from multiple sources of weather information, will be trained to understand inland and coastal weather patterns. See Domas Testimony, 12/12 Trans. at 141-44; Angieri Testimony, 12/18 Trans. at 34; Exh. APP-90.

40. In order to ensure that Airport personnel can proficiently operate the system, the tide gate manufacturer will run a training program for personnel in the proper management and control of the system. See Domas Testimony, 12/13 Trans. at 43; Exh. APP-90.

41. There will be two tidal flushes into the restored areas each day that will establish a saline environment. This salt water will carry an abundance of salt marsh seeds that will flow into the area, establish themselves in the soils and germinate in the spring. Over time, the area will be restored back to a healthy salt marsh environment. See Domas Testimony, 12/12 Trans. at 134-36, 12/13 Trans. at 31; Angieri Testimony, 12/18 Trans. at 29; Zawoy Testimony, 12/18 Trans. at 60; Exhs. APP-90, 136/8, DEP-13.

42. This conversion will increase the vegetative diversity of the restoration area and, in turn, increase the wildlife habitat diversity. There will be more fish species in the area, which in turn will attract birds, including Herons, Egrets and other shore birds. There will be "a much more enriched and vibrant habitat upon the conversion." See Dennis Testimony, 12/13 Trans. at 184-85; Zawoy Testimony, 12/18 Trans. at 60-62; Silva Testimony, 12/12 Trans. at 49-51.

43. The salinity levels in the restored area will be similar to those of Morris Cove. Classic salt marsh plants will flourish and prevent *Phragmites* from reestablishing. See Zawoy Testimony, 12/18 Trans. at 60.

44. From an ecological perspective, a classic salt marsh environment is superior to the system that presently exists because the lack of salt water has prevented the system from

functioning like a tidal wetland in a natural state – the soils have dried up, condensed and collapsed upon themselves. The more naturally occurring salt marsh that will be created will provide more diverse habitats and allow for many different wildlife, fish, shellfish, and other species to thrive on the Site. The restoration plan will "drastically" improve the existing wetland environment. See Zawoy Testimony, 12/18 Trans. at 61-62; Dennis Testimony, 12/13 Trans. at 189; Exh. APP-90.

45. In order to ensure that the restoration program is working, the permit conditions require a minimum 5 year monitoring period with annual reports by the Applicant. This will allow DEP to track the program's progress, identify any issues and make modifications as needed. See Domas Testimony, 12/12 Trans. at 149; Exhs. APP-90, DEP-46.

46. FAA has had success with similar restoration projects, including one at Hatches Harbor in Provincetown. See Silva Testimony, 12/12 Trans. at 49. DEP has reviewed and developed successful restoration plans similar to the one proposed by the Applicant and believes the proposed restoration plan will be successful. See Zawoy Testimony, 12/18 Trans. at 63. A wetland restoration project recently completed in Stratford, Connecticut on U.S. Fish and Wildlife property is restoring 42 acres of previously degraded wetlands. Comparable results can be expected here. See Dennis Testimony, 12/13 Trans. at 192-93.

IV. Alternatives Analysis

47. In the early 1990s, FAA began an Environmental Impact Statement ("EIS") process during which alternatives to the proposed activities were identified and assessed. The extensive analysis conducted with respect to each alternative is set forth in detail in the Draft EIS (APP-68) and was submitted to DEP in November 2000 with the Applicant's permit applications (APP-5) in a document entitled Volume II Environmental Report. See Silva Testimony, 12/12 Trans. at 44-45; Domas Testimony, 12/12 Trans. at 157; Exhs. APP-5, 68.

48. The EIS process, and specifically the identification of alternatives to the proposed activities, involved a significant public and municipal participation element. Municipal officials and members of the public were given the opportunity to raise potential alternatives, express comments and participate in FAA's alternatives assessment process. See Applicant's Objection to the Town of East Haven's Notice of Intervention; Exhs. APP-5, 68; see also Findings of Fact 199-205.

49. The following three alternatives were developed but rejected early in the EIS process without significant analysis by FAA:

- West Side Taxiway: A taxiway to the west of Runway 2/20 was considered as a means of eliminating wetlands impacts associated with the extension of Taxiway B. The Applicant considered two alignments: one with the standard 400 feet Runway-Taxiway centerline separation and one with a reduced separation of 275 feet. Both configurations were considered infeasible for a number of reasons, including that both entailed considerable wetland impacts, required a section of Morris Creek/Tuttle Brook to be

bridged and/or placed in a culvert and required a number of homes to be acquired and demolished.

- Extend Runway 20 and Shift Runway 2/20 North 750 feet: This alternative was intended to preserve the wetland environment south of Runway 2. This alternative was considered infeasible because it required the closure of Holmes, Breton, Carmel and Duval Streets and the acquisition and demolition of 83 residences. Also, by shifting the landing zone to the north, the elevation of Raynham Hill and other obstructions would interfere with landing approaches.
- Paving of Runway 2 RSA: This alternative was never considered a viable alternative but was included for the benefit of several members of the public in order to have FAA articulate what activities would have to occur for the Runway 2 RSA to be paved in the future.

See Domas Testimony, 12/13 Trans. at 13-17; Exhs. APP-5, 68.

A. Runway 20 RSA

50. Four alternatives were considered for the Runway 20 RSA:

- "No-Build": This alternative was to maintain existing conditions and was never considered by FAA as viable because it did not address the basic purpose and need of the project, which is to enhance safety at the Airport.
- FAA Standard: This alternative involved constructing a standard RSA of 500 feet by 1000 feet, culverting a significant portion of Morris Creek/Tuttle Brook in its current location and relocating Dodge Avenue and connecting it to Holmes Street. The Town of East Haven objected to this alternative because the connection of Dodge Avenue to Holmes Street (a residential street) would have required the widening of Holmes Street and the acquisition and demolition of a number of homes. Also, DEP objected to culverting such a significant length of Morris Creek/Tuttle Brook.
- Modified FAA Standard: This alternative involved constructing a modified RSA of 500 feet by 850 feet, relocating Dodge Avenue inside of Airport property and relocating Morris Creek/Tuttle Brook to the north and west of the RSA in an open creek channel. This alternative was carried forward for some time but FAA engineers ultimately rejected it for two reasons. First, it was 150 feet short of a standard RSA and FAA was not willing to compromise safety to this degree. Second, the grade differences between the relocated creekbank and the relocated Dodge Avenue were such that the resulting slope would be unstable and could slough off into the channel. In order to reduce the grade differential, a concrete retaining wall of 6 to 10 feet tall would have had to be constructed in the creek channel. If an aircraft ran the entire length of the 850 foot RSA, it would then nose-off into Morris Creek/Tuttle Brook and crash into a concrete wall. FAA would not support this scenario.

- Preferred Alternative: This alternative involved constructing a standard RSA of 500 feet by 1000 feet (adjusted to 950 feet in the northeast corner), relocating Dodge Avenue to inside Airport property and relocating part of Morris Creek/Tuttle Brook in a culvert running beneath the RSA with a significant portion then daylighting out to the west of the RSA in an open creek channel. This alternative was determined to be the most feasible and consistent with the basic purpose and need of the project – to enhance safety at the Airport.

See Domas Testimony, 12/12 Trans. at 158-164; Exhs. APP-5, 68.

B. Taxiway B

51. Five alternatives were considered for the Taxiway B rehabilitation and extension:

- "No-Build": This alternative was to maintain existing conditions and was never considered by FAA as viable because it did not address the basic purpose and need of the project, which is to enhance safety at the Airport.
- The second alternative involved maintaining Taxiway B in its existing location and rehabilitating the paved surface in place. This alternative also did not meet the basic purpose and need of the project because the lack of an extension of Taxiway B meant aircraft would still have to back-taxi on the Runway, an inherently unsafe activity.
- The third alternative involved maintaining Taxiway B in its existing location but shifting its alignment to a 400 foot Runway-Taxiway centerline separation. This alternative did not provide the extension of Taxiway B and meant aircraft would still have to back-taxi on the Runway. Also, this alternative entailed 12 acres of tidal wetlands impacts to the east of the existing Taxiway.
- The fourth alternative involved rebuilding Taxiway B and extending it to the end of Runway 2 with a 400 foot Runway-Taxiway centerline separation. Although this alternative accomplished the purpose and need of the project and achieved the 400 foot separation preferred by FAA, it entailed significant environmental impacts. The 400 foot separation would have placed the Taxiway squarely in wetlands and required extensive filling. FAA rejected this alternative because of the degree of environmental impacts.
- Preferred Alternative: This alternative involves rebuilding Taxiway B in its existing location and extending it to the end of Runway 2 with a 275 foot Runway-Taxiway centerline separation. This reduced separation entails significantly less wetland impacts and was viewed by FAA as the most feasible and consistent with the basic purpose and need of the project – to enhance safety at the Airport.

See Domas Testimony, 12/12 Trans. at 165-168, 12/13 Trans. at 13; Exhs. APP-68, 136/5.

C. Runway 2 RSA

52. Four alternatives were considered for the Runway 2 RSA:

- "No-Build": This alternative was to maintain existing conditions and was never considered by FAA as viable because it did not address the basic purpose and need of the project, which is to enhance safety at the Airport.
- Minimum Wetland Filling: This alternative involved the use of a "declared distance," a term used to describe declaring existing runway length unusable for takeoff and landing activities and counting it as part of an RSA. This would have required counting as RSA the existing 250 feet of clear area between the south end of the Runway and Morris Creek/Tuttle Brook, adding to that the additional 150 feet of clear area before the wetlands by relocating Morris Creek/Tuttle Brook, and moving the Runway threshold 600 feet to the north. This would have provided a 1,000 foot long RSA and required minimal tidal wetland filling at the Runway 2 end. By moving the threshold 600 feet to the north, however, the Airport lost 600 feet of usable runway length for landings and takeoffs, restricting Airport operations to an unacceptable degree. This alternative was not considered by FAA to be feasible or prudent.
- FAA Standard: This alternative involved constructing a standard RSA of 500 feet by 1,000 feet at an elevation of 10.5 NGVD. This alternative would have required a significant amount of fill to be placed in the wetland area and raised floodplain and wetland impact concerns.
- Preferred Alternative/Regraded FAA Standard: This alternative involved constructing a standard RSA of 500 feet by 1,000 feet, but at an elevation of 6.5 NGVD. This alternative minimized fill in the floodplain and entailed less impact to wetlands. This alternative was chosen specifically because of its decreased wetland impacts and was viewed by FAA as the most feasible and consistent with the basic purpose and need of the project – to enhance safety at the Airport.

See Domas Testimony, 12/12 Trans. at 168-73; Exh. APP-68.

D. Modified DEP Alternative

53. After the Draft EIS was published in October 1999, DEP proposed an additional alternative, which the Applicant addressed in a modified format in the Final EIS. DEP proposed constructing an 850 foot long RSA at the Runway 2 end, shifting the entire Runway 150 feet to the south and counting the southernmost 150 feet of existing paved runway as RSA. At the Runway 20 end, there would be a 150 foot extension of the Runway and an 850 foot turfed RSA. The final 150 feet of the Runway 2 RSA would be existing environmental conditions. See Domas Testimony, 12/12 Trans. at 17-21; Exh. APP-73.

54. This alternative was rejected because FAA would not consider the final 150 feet as RSA unless it was properly designed to support both aircraft and emergency vehicles/equipment and because it would have required considerable filling and relocation of Morris Creek/Tuttle Brook. Shifting the Runway 150 feet south resulted in the outer most light bar of the MALSF runway lighting system being located within Morris Creek/Tuttle Brook, resulting in obstructions to normal water flow through the creek channel. Also, shifting the Runway changed vertical approach conditions, meaning that a significant number of existing features (trees, rooftops, antenna, etc.) would obstruct aircraft landing approaches. This alternative also shifted the "runway protection zone" (an imaginary zone around an airport wherein FAA recommends that there be no congregations of people) such that 11 homes would be squarely within the zone. This alternative was rejected by FAA as infeasible and imprudent. See Domas Testimony, 12/12 Trans. at 17-21; Exh. APP-73.

E. EMAS

55. After permit applications were submitted to DEP in November 2000, DEP staff raised the alternative of an Engineered Materials Arresting System ("EMAS"). See Exh. APP-14.

56. EMAS consists of interstitial concrete blocks joined in a bed and installed on top of a paved surface. The system must be periodically sprayed with an epoxy substance to keep the surface impervious. The total length of the area available must be 600 feet, with the actual length of the EMAS bed designed for the critical aircraft at the airport. See Silva Testimony, 12/12 Trans. at 52-54.

57. When the EIS process began in the 1990s, EMAS was not approved by FAA as an alternative to a standard RSA because EMAS did not adequately provide for, and may exacerbate, an undershoot. See Domas Testimony, 12/12 Trans. at 52, 12/13 Trans. at 38; Exh. APP-12.

58. FAA is the entity charged by Congress with aviation safety and, to the exclusion of other federal or state agencies, is authorized to make determinations concerning how best to promote aviation safety. By letter dated October 3, 2001, FAA informed DEP that EMAS was not explored as an alternative to the proposed RSAs because it was not considered a substitute for or equivalent to standard RSAs and because the EIS process demonstrated that RSAs could

be obtained practicably, albeit with some unavoidable wetland impacts. To compensate for these impacts, FAA was willing to undertake a significant restoration program that would ultimately improve the conditions in Morris Creek/Tuttle Brook and nearby wetlands. FAA informed DEP that its RSA policy clearly provides that the first option is always to develop standard RSAs and that EMAS is a "last resort," due in part to the inability of EMAS to adequately protect against undershoots. FAA concluded that "[c]onsidering aviation safety, cost, engineering feasibility and environmental impact the FAA has demonstrated that the preferred alternative is a reasonable, practicable alternative." See Domas Testimony, 12/12 Trans. at 52; Exhs. APP-7, 12.

59. In March 2002, DEP informed the Applicant that it had adequately demonstrated that EMAS was not a viable alternative and that DEP was willing to proceed with the preferred alternative. See Exh. APP-17.

60. The Applicant performed a cost estimate comparison of the proposed RSA project and EMAS. The total cost of the proposed RSA project is $12,117,000 and for EMAS, $26,625,000 (figures adjusted for inflation to the year 2007 for the Runway 20 end and up to year 2008 for the Runway 2 end). These figures include maintenance costs associated with each system. For EMAS, these costs include having to replace the entire system every 10 years, replacing any portions involved in an accident or impacted by emergency vehicles/equipment, and spraying the system once a year with an epoxy spray to keep the surface impervious. For RSAs, the maintenance costs primarily consist of mowing expenses. The cost-benefit analysis demonstrates that EMAS is not economically feasible. See Silva Testimony, 12/12 Trans. at 53-54; Exhs. APP-7, 135.

61. EMAS is also not a feasible alternative for the Airport because (1) EMAS construction would still generate significant environmental impacts, including the relocation of Morris Creek/Tuttle Brook at both the Runway 2 end and Runway 20 end; (2) the entire system must be replaced every 10 years regardless of whether it has been impacted by an excursion; (3) any portions involved in an excursion or impacted by emergency equipment must be promptly replaced following any accident; (4) the system must be sprayed with an epoxy spray every year to keep the surface impervious, which raises environmental concerns for the immediately adjacent wetlands; and (5) EMAS must be installed on a paved surface, which would entail additional water drainage and runoff problems. In addition, because EMAS consists of large, white pieces of concrete bonded together, it is not visually appealing, particularly for the surrounding residential neighborhoods. See Silva Testimony, 12/12 Trans. at 54-58, 61; Exh. APP-131.

62. Considering aviation safety, cost, engineering feasibility and environmental impact, the preferred alternative is the most feasible and prudent. Installation of the RSAs as proposed would provide a significant enhancement of aviation safety at the Airport. See Silva Testimony, 12/12 Trans. at 23, 48.

V. The Applications: Satisfaction of Statutory and Regulatory Criteria

63. The Applicant submitted to DEP four permit applications covering all proposed regulated activities. Each permit application was reviewed by the appropriate DEP department for satisfaction of relevant statutory and regulatory criteria. See Exhs. APP-5, 40, 42, 61; Zawoy Testimony, 12/18 Trans. at 44-111; Golembiewski Testimony, 12/18 Trans. at 127-36; Testimony of Sharon Yurasevecz ("Yurasevecz Testimony"), 12/18 Trans. at 137-48; Testimony of Karen Allen ("Allen Testimony"), 12/18 Trans. at 150-58.

64. In determining jurisdiction over the proposed regulated activities, DEP concluded that all wetlands up to elevation 3.5 NGVD were tidal wetlands and under the jurisdiction of DEP's Office of Long Island Sound Programs ("OLISP") and all wetlands above 3.5 NGVD were inland wetlands and under the jurisdiction of DEP's Inland Water Resources Division ("IWRD"). As the majority of the impacts associated with the proposed activities impacted tidal wetlands, OLISP took the lead in permit application review and undertook the majority of review coordination. See Zawoy Testimony, 12/18 Trans. at 55.

A. Programs Administered by the Office of Long Island Sound Programs

65. On November 6, 2000, pursuant to Connecticut General Statutes ("C.G.S.") §§ 22a-28 to 22a-35, § 22a-359 et seq., Regulations of Connecticut State Agencies ("R.C.S.A.") §§ 22a-30-1 to 22a-30-17, and 33 U.S.C. § 1341, the Applicant submitted to DEP an application for a Structures, Dredging & Fill and Tidal Wetlands Permit and a 401 Water Quality Certificate. See Exh. APP-5.

66. On November 14, 2000, in accordance with C.G.S. § 22a-6g, the Applicant caused to be published in the New Haven Register a notice of filing of a Permit Application for Programs Administered by OLISP. Notice was mailed to both Mayor John DeStefano of New Haven and Mayor Joseph Maturo, Jr. of East Haven. A completed Certification of Notice Form and a copy of the published notice were forwarded to DEP. See Exh. APP-6.

67. The permit application was assigned Permit Application #200003049-KZ. See Exh. APP-9.

68. On September 21, 2001, the Applicant submitted to DEP Supplement #1 on Permit Application #200003049-KZ. See Exh. APP-10.

69. On September 28, 2001, the Applicant submitted to DEP Supplement #2 on Permit Application #200003049-KZ. See Exh. APP-11.

70. On October 9, 2001, the Applicant submitted to DEP Supplement #3 on Permit Application #200003049-KZ. See Exh. APP-13.

71. On December 17, 2001, the Applicant submitted to DEP Supplement #4 on Permit Application #200003049-KZ. See Exh. APP-15.

72. On March 19, 2002, the Applicant submitted to DEP Supplement #5 on Permit Application #200003049-KZ. See Exh. APP-18.

73. On May 3, 2002, the Applicant submitted to DEP Supplement #6 on Permit Application #200003049-KZ. See Exh. APP-19.

74. On April 25, 2005, the Applicant submitted to DEP Supplement #7 on Permit Application #200003049-KZ. See Exh. APP-22.

75. On July 19, 2005, the Applicant submitted to DEP Permit Application Addendum July 19, 2005. See Exh. APP-23.

76. In August 2006, the Applicant forwarded to DEP Final Conformed Permit Application #200003049-KZ. See Exh. APP-40.

77. On August 22, 2006, DEP issued a Notice of Tentative Determination/Notice of Public Information Meeting/Notice of Intent to Hold a Public Hearing regarding, inter alia, Application #200003049-KZ. See Exhs. DEP-20; APP-38.

78. On August 22, 2006, DEP issued Draft Permit 200003049-KZ. See Exh. DEP-21.

79. On September 21, 2006, the Applicant conducted a Public Information Meeting regarding the project at Robinson Aviation in East Haven at which the project was explained and the public was invited to ask questions and make comments. See Exhs. DEP-20, APP-38.

80. In December 2006, DEP issued Revised Draft Permit 200003049-KZ. See Exh. DEP-46.

81. In February 2007, DEP issued Second Revised Draft Permit 200003049-KZ. See Exh. DEP-46a.

82. Mr. Zawoy of OLISP conducted several inspections of the Site. See Zawoy Testimony, 12/18 Trans. at 51.

83. In accordance with DEP's Environmental Equity Policy, OLISP coordinated with DEP's Environmental Equity Section, which Section did not have any specific concerns regarding the proposed activity. In addition, beginning with the EIS process in the early 1990s, extensive public outreach was conducted by the Applicant to both inform and elicit comments from the public with respect to the proposed activities. See Zawoy Testimony, 12/18 Trans. at 49; see also Findings of Fact 199-205.

84. The Site is located within a coastal boundary, as defined in C.G.S. § 22a-94(b). The following coastal resources exist at the site: tidal wetlands, coastal waters, coastal hazard areas, developed shorefront, shellfish resources, fisheries resources, wildlife resources. See Zawoy Testimony, 12/18 Trans. at 57; Exh. DEP-13.

85. The primary area of tidal wetlands impacts is at the Runway 2 end, where 9.41 acres of wetlands will be filled. See Domas Testimony, 12/12 Trans. at 129-33; Exhs. APP-40, 42. The primary area of coastal waters impact is at the Runway 20 end where .92 acres of Morris Creek/Tuttle Brook will be filled but where 1.79 new acres of coastal waters will be created. See Domas Testimony, 12/12 Trans. at 122; Exh. APP-40.

86. Tidal wetlands are located immediately north of the tide gate structure and continue northward in and around Morris Creek/Tuttle Brook in the area south of Runway 2. Tidal wetlands also are located to the east and west of Runway 2 and continue to the east up to Pig Farm Road. An area of tidal wetlands continues on the west side of the Runway following Morris Creek/Tuttle Brook. See Zawoy Testimony, 12/18 Trans. at 57-58; Domas Testimony, 12/12 Trans. at 127-29; Exh. APP-40.

87. The majority of the wetlands being impacted are not classic salt marsh environments but are significantly degraded and comprised primarily of a *Phragmites* monoculture. The current wetland system lacks significant ecological or habitat value for wildlife, including birds, fish and shellfish. See Zawoy Testimony, 12/18 Trans. at 62-63; Silva Testimony, 12/12 Trans. at 50-51; Domas Testimony, 12/12 Trans. at 127-29; Dennis Testimony, 12/13 Trans. at 181; Exh. APP-90.

88. The Applicant has minimized wetland filling to the greatest extent possible consistent with the public safety goal of the project. See Zawoy Testimony, 12/18 Trans. at 67; Domas Testimony, 12/12 Trans. at 158-73; Exh. APP-68.

89. To assess potential impacts to coastal hazard areas associated with the proposed activities, OLISP coordinated a review with IWRD. IWRD assessed possible flooding concerns associated with the project and examined the hydraulic modeling performed for the Site. See Zawoy Testimony, 12/18 Trans. at 90-92.

90. The proposed activities pose no significant adverse impacts to coastal hazard areas. See Zawoy Testimony, 12/18 Trans. at 90-92.

91. The restoration plan proposed by the Applicant adequately compensates for the loss of tidal wetlands and the plan should result in a "significant improvement to this tidal marsh system with increased fish production being one potential benefit." See Zawoy Testimony, 12/18 Trans. at 68; Exh. DEP-11.

92. The restoration program will dramatically improve environmental conditions in the area. Similar restoration projects have been successfully undertaken elsewhere in Connecticut, including a project in Stratford where 42 acres of tidal wetlands were created on U.S. Fish and Wildlife Service property. "[G]iven the tidal influences that will get through this area and then extend to the upper reaches of both mitigation sites . . . the conversion would most certainly occur." See Dennis Testimony, 12/13 Trans. at 192-93.

93. DEP's 5 year monitoring program will help to ensure the success of the restoration program. As a condition of the permit, the Applicant must engage in a 5 year

monitoring plan, which requires the submittal of regular reports to DEP that include data about water and salinity levels, wetland plant growth and fish and shellfish resource improvements. DEP will closely review the progress reports and make recommendations if an aspect of the plan appears to not be functioning well. The monitoring reports enable DEP to control the project for a minimum of 5 years. DEP can also extend the monitoring period if it wishes. See Zawoy Testimony, 12/18 Trans. at 63-65, 126; Exh. DEP-46a.

94. DEP considered the impact of storm water discharges on the tidal wetlands on Site, including tidal wetlands proposed to be created. Fresh water from storm events will enter the salt marsh system and be quickly diluted by large volumes of salt water that will be entering the area twice daily; these fresh water inputs will not materially alter the marine environment. See Zawoy Testimony, 12/18 Trans. at 68-70.

95. To assess potential impacts to wildlife associated with the proposed activities, OLISP coordinated a review with DEP's Wildlife Division. This review identified several migratory shore birds that may be impacted by the loss of wetland habitat. To address these potential impacts, the Wildlife Division recommended to OLISP that a grassway be incorporated into the project plans to provide an area for shore birds to feed. A condition of the permit is that the RSAs and other portions of the property be seeded with a grass seed mixture that will provide a seed source and habitat for shore birds. Also included as a condition of the permit is a mowing plan to ensure that the habitat value of the grassway is maximized. See Zawoy Testimony, 12/18 Trans. at 72-74; Dennis Testimony, 12/13 Trans. at 190-91; Exhs. DEP-3, 9, 10, 46a.

96. The proposed seeding plan "address[es] the mitigation needs for potential state-listed grassland bird impacts in a comprehensive way [and] [u]se of the recommended seed mix may improve or actually enhance habitat available for these birds." See Exh. DEP-9.

97. The proposed seeding plan is not likely to create airstrike concerns because the grassland birds that will be attracted by the seed mix "are not flocking birds but, rather, spend much of their time at ground level foraging and the reaction of many of them is to run when startled rather than fly. This behavior makes them much less likely to be a problem in terms of airstrikes." In addition, the mowing schedule imposed as a permit condition can discourage flocking birds such as Canadian geese, starlings and gulls from congregating in the area. See Zawoy Testimony, 12/18 Trans. at 74; Dennis Testimony, 12/13 Trans. at 189-90; Exh. DEP-9.

98. The herbicide proposed to eradicate *Phragmites* on the Site will not adversely impact wildlife. The herbicide is a glyphosate chemical with a short half life (it persists in the environment for approximately 7-10 days) that has been well-studied for its ecological impacts, is currently used by both DEP's Land Division and Wetland Habitat and Mosquito Management Program and is recommended by OLISP any time a wetland restoration project involves *Phragmites* removal. The herbicide also is approved by EPA. See Zawoy Testimony, 12/18 Trans. at 75-76; Dennis Testimony, 12/13 Trans. at 204-05; Domas Testimony, 12/12 Trans. at 152.

99. The transition of the existing *Phragmites* monoculture to a more traditional tidal wetland environment will benefit migratory shore birds and other species that frequent the area. See Zawoy Testimony, 12/18 Trans. at 73-74.

100. To assess potential impacts to shellfish resources associated with the proposed activities, OLISP coordinated a review with the Department of Agriculture, Bureau of Aquaculture. The only significant shellfish resources in the area are located south of the tide gates off of Cart Road. To protect these resources and prevent soils from entering the waterway and impacting downstream habitats, the Applicant will lay down matting on all exposed slopes to keep soils intact once grading activities begin. In addition, the Applicant will follow the procedures articulated in the Soil and Erosion Control Plan. To ensure that downstream habitats are not affected, permit conditions require that if silt enters the waterway, grading and other activities will cease until the issue is addressed. See Zawoy Testimony, 12/18 Trans. at 79-82; Exhs. DEP-14, 15, 16, 46.

101. To offset any potential impacts to shellfish resources, a permit condition requires the Applicant to lay down oyster cultch to create additional oyster habitat after project completion. See Zawoy Testimony, 12/18 Trans. at 81-82; Exh. DEP-46a.

102. The proposed activities pose no significant adverse impacts to shellfish resources. See Zawoy Testimony, 12/18 Trans. at 79; Exh. DEP-15. In fact, "[t]he replacement of the tide gates will improve the oyster habitat in upper Morris Creek." See Exh. DEP-15.

103. To assess potential impacts to endangered, threatened or special concern species associated with the proposed activities, OLISP coordinated a review with DEP's Environmental and Geographic Information Center ("EGIC"). In connection with this review, the Applicant submitted to DEP a Natural Diversity Data Base Review Request Form and conducted a field survey of the area. See Exh. APP-40. EGIC identified three bird species on the Site and it was determined that the seeding program would offset any impacts to these birds by enhancing both food and habitat resources at the site. See Zawoy Testimony, 12/18 Trans. at 82-84.

104. The proposed activities will not have any negative impact on endangered, threatened or special concern species. In fact, "[t]he proposed action can really only benefit any and all of these species, [such as] the Great Egret, Snowy Egret . . . Least Terns, Sharp-Shinned Hawk, Northern Harriers . . . ." See Dennis Testimony, 12/13 Trans. at 192.

105. The proposed activities pose no significant adverse impacts to endangered, threatened or special concern species. See Zawoy Testimony, 12/18 Trans. at 82-84; Exhs. DEP-3, 10.

106. To assess potential impacts to fisheries resources associated with the proposed activities, OLISP coordinated a review with DEP's Fisheries Division. In addition to assessing potential adverse impacts, the Fisheries Division was consulted in the early EIS process to develop a fisheries enhancement component of the project. The Division assisted the Applicant in designing the new creek with meanders similar to a natural creek bed and in enlarging the total area of the new creek to provide more square footage of fish habitat. In addition, the Division

assisted the Applicant in designing the tide gate structure to ensure that the gate openings were large enough to allow fish to freely move upstream, and assisted in designing the culvert at the Runway 20 end with a sandy bottom, rather than one of concrete, to create an enhanced fish habitat. See Zawoy Testimony, 12/18 Trans. at 84-87; Exhs. DEP-4, 5, 7, 8, 11.

107. The proposed activities pose no significant adverse impacts to fisheries resources. In fact, the proposed activities will likely have a "significant benefit" to fisheries resources. See Zawoy Testimony, 12/18 Trans. at 84-87; Exh. DEP-7.

108. To assess potential impacts to water quality associated with the proposed activities, OLISP coordinated with IWRD. The Applicant worked with IWRD to characterize soils on Site, test for pollutants and design construction activity protocols to ensure that discharges associated with the proposed activities will not adversely impact water quality. See Zawoy Testimony, 12/18 Trans. at 87-90.

109. The proposed activities pose no significant adverse impacts to water quality in the area. In fact, implementation of the Storm Water Management Plan, Soil and Erosion Control Plan and tidal wetland restoration plan will result in a "significant improvement" in surface water quality. See Zawoy Testimony, 12/18 Trans. at 87-90.

110. The proposed activities are consistent with the policies articulated in the Coastal Management Act, General Statutes §§ 22a-90 to 22a-112. See Zawoy Testimony, 12/18 Trans. at 66; Exh. APP-2.

111. The proposed activities are consistent with Section 401 of the federal Clean Water Act (33 U.S.C. § 1341) and the Connecticut Water Quality Standards, such that all Coastal 401 Water Quality Certification requirements are met. See Zawoy Testimony, 12/18 Trans. at 87-90; Exh. APP-40.

112. OLISP assessed alternatives to the proposed activities that may minimize impacts to wetlands and concluded that there are no feasible or prudent alternatives consistent with the public safety goal of the proposed activities. See Zawoy Testimony, 12/18 Trans. at 67, 93-94.

113. The Revised Draft Permit issued by DEP in December 2006 contained Condition 31, which was intended to address the possibility that, if at some point in the future the Airport ceases to operate at the Site, the filled area at the Runway 2 end might be used for a purpose unrelated to aviation safety and not contemplated by the permit. Condition 31 of the Revised Draft Permit required that, in the event the Airport ceased to function as an airport at some time in the future, the fill authorized by the permit for the construction of the Runway 2 RSA will have to be removed. Condition 31 of the Revised Draft Permit stated in its entirety:

> In the event that the Permittee, or any subsequent owners of the property, do not maintain an operational airport at the site or aircraft used at the site no longer require the use of RSA-2, the property owner shall remove RSA-2 to the pre-construction condition. Accordingly, the property owner shall submit an application to remove the fill authorized in SCOPE OF AUTHORIZATION, paragraph 4., above, to the pre-construction activity

no later than 60 days prior to the termination of airport activity or the use of the RSA-2.

Exh. DEP-46.

114. After consulting with FAA and Airport management, the Applicant objected to Condition 31 on several grounds. First, the Site is not owned by the Applicant but is owned by the City of New Haven (the Applicant operates the Airport pursuant to a Lease and Operating Agreement with the City). Given the City's ownership and the fact that the City, while supportive of the project, is not a party to the permitting proceedings, DEP may not have the authority to obligate the City to undertake and fund the activities set forth in Condition 31. See 12/18 Trans. at 3-12. In addition, FAA has specific airport closure protocols and procedures that would have to be strictly adhered to should the Airport ever cease operations. The requirements of Condition 31 may conflict with FAA's protocols and procedures.

115. DEP and the Applicant engaged in discussions regarding Condition 31 during and after the close of the hearing and ultimately agreed to amend the language of Condition 31 to address the issues identified. Revised Condition 31, the language of which was specifically agreed to by the Applicant, was incorporated into the Second Revised Draft Permit. See Exh. DEP-46a.

116. In February 2007, DEP and the Applicant jointly submitted to the Hearing Officer a Motion to Open the Record for the limited purpose of allowing DEP to submit into the evidentiary record the Second Revised Draft Permit containing revised Condition 31. See Department of Environmental Protection and Applicant Tweed-New Haven Airport Authority's Joint Motion to Open Record; Exh. DEP-46a. Revised Condition 31 states in its entirety:

> "In the event that the Permittee or any successor does not maintain an operational airport at the site, the Permittee or any successor shall, within 60 days of the termination of such operations, submit a closure plan to the Commissioner, for review and approval, to address the presence of the fill authorized in the SCOPE OF AUTHORIZATION, paragraph 4 above. The closure plan, approval of which shall be within the sole discretion of the Commissioner, shall present an evaluation of alternatives regarding the presence of the fill authorized in the SCOPE OF AUTHORIZATION, paragraph 4 above, including but not limited to the environmental and economic impacts and estimated cost of removal of such fill and restoration of the RSA-2 to pre-construction condition. Permittee or any successor shall implement the closure plan as approved by the Commissioner.

Exh. DEP-46a.

117. OLISP has concluded that the permit applications should be approved, subject to the revised permit conditions. See Zawoy Testimony, 12/18 Trans. at 99; Exh. DEP-46a.

B. Programs Administered by the Inland Water Resources Division

118. On November 6, 2000, in accordance with C.G.S. §§ 22a-36 to 22a-45, C.G.S. §§ 22a-369 to 22a-380, R.C.S.A. §§ 22a-39-1 to 22a-39-15 and 33 U.S.C. § 1341, the Applicant submitted to DEP a Permit Application for Programs Administered by IWRD, specifically, an Inland Wetlands Permit, a Diversion Permit and a 401 Water Quality Certificate. See Exh. APP-42.

119. On November 14, 2000, in accordance with C.G.S. § 22a-6g, the Applicant caused to be published in the New Haven Register a notice of filing of a Permit Application for Programs Administered by IWRD. Notice was mailed to both Mayor John DeStefano of New Haven and Mayor Joseph Maturo, Jr. of East Haven. A completed Certification of Notice Form and a copy of the published notice were forwarded to DEP. See Exh. APP-43.

120. Permit applications were assigned Permit Application numbers IW-2000-116 and DIV-200003052. See Exh. DEP-20.

121. On April 25, 2005, the Applicant submitted to DEP Supplement #1 on the IWRD Permit Application. See Exh. APP-48.

122. On July 19, 2005, the Applicant submitted to DEP IWRD Permit Application Addendum July 19, 2005. See Exh. APP-51.

123. On July 21, 2005, the Applicant submitted to DEP IWRD Permit Application Addendum July 21, 2005. See Exh. APP-52.

124. On August 8, 2005, the Applicant submitted to DEP IWRD Permit Application Addendum August 8, 2005. See Exh. APP-53.

125. On October 28, 2005, the Applicant submitted to DEP IWRD Permit Application Addendum October 28, 2005. See Exh. APP-56.

126. On March 22, 2006, the Applicant submitted to DEP IWRD Permit Application Addendum March 22, 2006. See Exh. APP-57.

127. On March 22, 2006, the Applicant submitted to DEP Attachment G Plans to IWRD Permit Application. See Exh. APP-58.

128. On April 5, 2006, in accordance with C.G.S. § 22a-6g, the Applicant caused to be republished in the New Haven Register a notice of filing of a Permit Application for Programs Administered by the IWRD. This second publication corrected a minor typographical error in the original November 14, 2000 public notice. Notice was mailed to both Mayor John DeStefano of New Haven and Mayor Joseph Maturo, Jr. of East Haven. A completed Certification of Notice Form and a copy of the published notice were forwarded to DEP. See Exh. APP-59.

129. In August 2006, the Applicant submitted to DEP a Final Conformed IWRD Permit Application. See Exhs. APP-40, 60A.

130. Pursuant to C.G.S. § 22a-371, DEP has determined that application No. DIV-200003052 is complete. See Exh. DEP-20.

131. On August 22, 2006, DEP issued a Notice of Tentative Determination/Notice of Public Information Meeting/Notice of Intent to Hold a Public Hearing regarding, inter alia, Application Nos. DIV-200003052, IW-2000-116 and WQC-200003051. See Exhs. DEP-20; APP-38.

132. On August 22, 2006, DEP issued Draft Permit Nos. IW-2000-116, DIV-200003052 and WQC-200003051. See Exh. DEP-32.

133. On September 21, 2006, the Applicant conducted a Public Information Meeting regarding the project at Robinson Aviation in East Haven at which the project was explained and the public was invited to ask questions and make comments. See Exhs. DEP-20, APP-38.

134. Inland wetlands are located predominantly on the perimeter of the Site, primarily in the northeast and southeast corners. See Testimony of Brian Golembiewski ("Golembiewski Testimony"), 12/18 Trans. at 129; Exh. APP-131.

135. There are four primary inland wetlands impact areas associated with the proposed activities:

a. Southwest of the Runway 2 end, the Applicant proposes to fill approximately .2 acres of inland wetlands to construct the relocated Morris Creek/Tuttle Brook channel. This wetland area is degraded and largely *Phragmites*-dominated. These activities will isolate an area currently considered tidal wetlands and thereby convert .27 acres of tidal wetlands to inland wetlands.
b. The Applicant proposes to excavate .02 acres of inland wetlands to facilitate the relocation of Morris Creek/Tuttle Brook at the Runway 2 end. The affected wetlands area is degraded and largely *Phragmites*-dominated.
c. East of Taxiway B, the Applicant proposes to fill .02 acres of inland wetland to facilitate the construction of a rip-rap pad at the outlet of a storm drainage culvert. The affected wetland area contains both *Phragmites* and other wetland vegetation.
d. The Applicant proposes to fill .66 acres of inland wetlands to facilitate the construction of a temporary haul road from Taxiway B to Ora Avenue. When the project is completed, the roadway will be removed and a restoration plan will be implemented that includes planting of shrubs and various tree species. The affected wetland area is degraded and largely *Phragmites*-dominated.

See Golembiewski Testimony, 12/18 Trans. at 129-132; Exhs. DEP-20, 28, 58.

136. Overall impacts to inland wetlands are "minor in nature" and "should not adversely affect the long-term productivity of such wetlands." See Exh. DEP-28.

137. The diversion of northern and southern sections of portions of Morris Creek/Tuttle Brook is required for construction of both the Runway 2 and Runway 20 RSAs. See Exh. APP-40.

138. The water diversion regulations require that the proposed diversion be consistent with the flood management statutes of chapter 476a of the General Statutes, and regulations thereunder. The flood management regulations require that the design of stormwater drainage, open channels, culverts and bridges be in accordance with the Connecticut Department of Transportation Drainage Manual. See R.C.S.A. § 22a-377(c)-(f)(3); Yurasevecz Testimony, 12/18 Trans. at 140-41.

139. The Airport is located in the 100 year floodplain of Long Island Sound (elevation 10.7 NGVD). A Conditional Letter of Map Revision ("CLOMR") was received by DEP from FEMA on February 18, 2005, and was issued for Morris Creek/Tuttle Brook. The approved CLOMR was used in the development of the hydraulic analysis for this project. See Yurasevecz Testimony, 12/18 Trans. at 141; Exhs. APP-103, DEP-47.

140. Hydraulic modeling and supporting documentation demonstrate that the proposed activity will not increase the 100 year water surface elevation over existing conditions. The activities proposed within the floodway will not result in any increase in water surface elevation for a 10 year or 100 year flood event. See Yurasevecz Testimony, 12/18 Trans. at 142-43; Exh. DEP-47.

141. The proposed activities will not affect the flood storage capacity or flood control value of the floodplain. The relocation of Morris Creek/Tuttle Brook and proposed restoration project will result in a net cut over the entire area, thereby increasing flood storage capacity. See Yurasevecz Testimony, 12/18 Trans. at 142; Exh. DEP-47.

142. The proposed culvert conveying Morris Creek/Tuttle Brook under Dodge Avenue is designed to pass the 5 year frequency storm with an under clearance of 0.4 feet. The structure will overtop during the 100 year flood event, however, relative to the existing conditions, this overtopping will be of lesser depth and shorter duration. See Yurasevecz Testimony, 12/18 Trans. at 143; Exh. DEP-47.

143. Relocated Morris Creek/Tuttle Brook has a minimum flow capacity to contain the 25 year storm event. The channel sizing, bottom material and erosion control matting along the embankments have been adequately designed in accordance with the 2000 DOT Drainage Manual. See Yurasevecz Testimony, 12/18 Trans. at 143-44; Exh. DEP-47.

144. The Applicant's water-handling plan for all proposed in-stream work is in accordance with the 2002 Connecticut Erosion and Soil Guidelines, which is used as a standard in review of diversion applications. See Yurasevecz Testimony, 12/18 Trans. at 144; Exh. DEP-47.

145. The proposed Flood Contingency Plan relies on advanced weather forecasting of potential flooding for both pre- and post-construction periods. In the event of potential flooding, the contractor will secure or remove all equipment and materials to locations above the 500 year flood elevation. There are two locations on airport property that are above the 500 year flood elevation; both areas will be available for storage of equipment and materials during flood events. See Yurasevecz Testimony, 12/18 Trans. at 144; Exh. DEP-47.

146. Two building structures are proposed: a MALSF equipment building and the tide gate generator building. Both will be elevated with the lowest floor above the base flood elevation of 10.7 NGVD. See Yurasevecz Testimony, 12/18 Trans. at 145; Exh. DEP-47.

147. Two temporary bridges are proposed over Morris Creek/Tuttle Brook. Both are engineered to pass the 100 year storm design criteria and will be securely anchored. All temporary structures affecting flood flows have been designed in accordance with the 2000 DOT Drainage Manual. See Yurasevecz Testimony, 12/18 Trans. at 145; Exh. DEP-47.

148. The stormwater drainage system at Dodge Avenue is designed for a 10 year storm event in accordance with the 2000 DOT Drainage Manual and flood management regulations relating to roadway standards. The existing hydrodynamic separator proposed for demolition

will be replaced with a new proposed system, thereby enabling pre-treatment of stormwater. The separator uses swirl technology to remove pollutants before discharging into wetlands. See Yurasevecz Testimony, 12/18 Trans. at 145-46, 48; Exh. DEP-47.

149. The airfield stormwater drainage system has been designed in accordance with FAA design standards for a 5 year frequency storm. See Yurasevecz Testimony, 12/18 Trans. at 146, 48; Exh. DEP-47.

150. The storm drainage outlets and swales have been designed in accordance with the 2000 Connecticut DOT Drainage Manual. Appropriate riprap protection will be installed at required discharge locations to ensure that the discharge will not cause erosion. See Yurasevecz Testimony, 12/18 Trans. at 146, 48; Exh. DEP-47.

151. All proposed activities, including stormwater quality and erosion and sedimentation controls, were reviewed and are regulated under the NPDES Permit. Portions of the project involve erosion and sediment control measures requiring an engineered design. IWRD evaluated these measures for compliance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Controls. For slopes steeper than 2:1, or when slopes are steeper than 3:1 and the change in elevation exceeds 15 feet without a cross slope bench, engineered structural design features have been incorporated into the project. See Yurasevecz Testimony, 12/18 Trans. at 147; Exh. DEP-47.

152. The proposed activities will not result in an adverse increase in flood elevations or negatively affect flood storage. See Yurasevecz Testimony, 12/18 Trans. at 147; Exh. DEP-47.

153. The proposed activities have been designed in compliance with the Floodplain Management and Stormwater management requirements of C.G.S. §§ 25-68b through 25-68h and R.C.S.A. §§ 25-68h-1 through 25-68h-3. See Yurasevecz Testimony, 12/18 Trans. at 147; Exh. DEP-47.

154. Pursuant to C.G.S. § 22a-366, the proposed diversion: (1) is necessary; (2) will not significantly affect long range water resource management; and (3) will not impair proper management and use of the water resources of the state. See Exh. DEP-20.

155. The proposed activities are consistent with the policies articulated in the Coastal Management Act, General Statutes §§ 22a-90 to 22a-112. See Zawoy Testimony, 12/18 Trans. at 66; Exh. APP-2.

156. As part of the EIS/EIE process, the project was reviewed for consistency with the 1998 State Plan for Conservation and Development; Chapter 2 of the FEIS/EIE document assesses the project's consistency with the Plan's goals and policies. See Domas Testimony, 12/13 Trans. at p. 60; Exhs. APP-132, 73. The Connecticut Office of Policy and Management ("OPM") subsequently approved the EIS/EIE document and concluded that it satisfies the requirements of the Connecticut Environmental Policy Act, which requirements include consistency with the Plan. See Exh. APP-81; Domas Testimony, 12/13 Trans. at 61.

157. In connection with the proposed diversion of Morris Creek/Tuttle Brook, IWRD reviewed the EIS/EIE document and was aware that OPM had approved the document, indicating consistency with the 1998 Plan. See Golembiewski Testimony, 12/18 Trans. at 134-35.

158. The proposed diversion is consistent with the relevant policies of the 2005 State Plan for Conservation and Development. See Golembiewski Testimony, 12/18 Trans. at 136-37; Exh. APP-132A.

159. The proposed activities are consistent with Section 401 of the federal Clean Water Act (33 U.S.C. § 1341) and the Connecticut Water Quality Standards, such that all Inland 401 Water Quality Certification requirements are met. See Exh. APP-40.

160. The proposed activities are consistent with the state's flood management standards and regulations set forth in C.G.S. §§ 25-68b through 25-68h and R.C.S.A. §§ 25-68h-1 through 25-68h-3, such that all Flood Management Certification requirements are met. See Exh. APP-40.

161. The Applicant proposes to utilize Pig Farm Road, a historic gravel roadbed located immediately east of Runway 2/20 and Taxiway B, as a temporary haul road from Taxiway B to Ora Avenue during the construction phase of the project. The Applicant proposes to temporarily place gravel on the roadway to raise its elevation and support construction equipment. See Domas Testimony, 12/13 Trans. at 54-59; Exh. APP-68.

162. Because Pig Farm Road serves as a boundary between the tidal and freshwater wetlands at the Site, it is important that once construction activities are completed, the existing elevations of the roadbed be reestablished and maintained.

163. To ensure that existing elevations of Pig Farm Road are achieved and maintained post-construction, and to maintain the integrity of the tidal/freshwater boundary, DEP has proposed, and the Applicant has agreed, that the Applicant undertake the following activities: (1) retain a professional land surveyor to establish the existing elevations of Pig Farm Road for its entire length after the Road is cleared of trees and prior to construction; (2) retain a professional land surveyor to confirm whether post-construction elevations of the roadbed have changed; (3) grade the roadbed to match the pre-construction elevations (if necessary); and (4) submit an as-built drawing prepared by a professional land surveyor that demonstrates that the pre-construction elevations of Pig Farm Road have been re-established to within an average of plus or minus 2 inches post-construction.

C. NPDES Application

164. On February 10, 2006, in accordance with C.G.S. §§ 22a-416 to 22a-438 and R.C.S.A. §§ 22a-430-1 to 22a-430-7, the Applicant submitted to DEP a Permit Application for Wastewater Discharges to discharge stormwater and dewatering wastewaters associated with construction activities. See Allen Testimony, 12/18 Trans. at 151; Exhs. APP-61; DEP-48.

165. On February 14, 2006, in accordance with C.G.S. § 22a-6g, the Applicant caused to be published in the New Haven Register a notice of filing of a Permit Application for Wastewater Discharges. Notice was mailed to both Mayor John DeStefano of New Haven and Mayor Joseph Maturo, Jr. of East Haven. A completed Certification of Notice Form and a copy of the published notice were forwarded to DEP. See Exh. APP-62.

166. On March 3, 2006, DEP issued to the Applicant a Notice of Sufficiency indicating Application #200600317 was complete. See Exh. APP-63.

167. On May 5, 2006, the Applicant submitted to DEP revisions to Attachment O of Application #200600317. See Exh. DEP-64.

168. On July 26, 2006, the Applicant submitted to DEP an updated/expanded Application #200600317. See Exhs. APP-65, 66.

169. In August 2006, the Application submitted to DEP a final conformed Application #200600317. See Exh. APP-40.

170. On August 22, 2006, DEP issued a Notice of Tentative Determination/Notice of Public Information Meeting/Notice of Intent to Hold a Public Hearing regarding, inter alia, Application No. 200600317, in accordance with C.G.S. § 22a-430 and R.C.S.A. §§ 22a-430-3 and 22a-430-4 . See Exhs. DEP-20; APP-38.

171. On August 22, 2006, DEP issued Draft Permit No. CT00304567. See Exh. DEP-39.

172. On September 21, 2006, the Applicant conducted a Public Information Meeting regarding the project at Robinson Aviation in East Haven at which the project was explained and the public was invited to ask questions and make comments. See Exhs. DEP-20, APP-38.

173. In conjunction with the NPDES Application, DEP reviewed the Soil Assessment Report and the Design Drawing Set submitted by the Applicant. See Allen Testimony, 12/18 Trans. at 152; Exh. DEP-48, APP-22, 27.

174. The proposed wastewaters will be generated by the dewatering of excavations and soil stockpiles resulting from the construction of RSAs at both ends of Runway 2/20, the extension and rehabilitation of Taxiway B, the relocation of portions of Morris Creek/Tuttle Brook and an associated unnamed tributary. See Allen Testimony, 12/18 Trans. at 151-52; Exh. DEP-48.

175. Three specific types of wastewater discharges are expected to be generated during the construction: (1) dewatering wastewaters from the excavation and stockpiles (including the dewatering of the cofferdams during renovation of the tide gates), (2) water draining from the proposed secondary stockpile area, and (3) stormwater runoff from areas under construction. See Allen Testimony, 12/18 Trans. at 152; Exh. DEP-48.

176. The Applicant proposed 11 dewatering sites and discharge locations. The Applicant also has submitted projected concentrations of the constituents expected to be found in the wastewaters, as well as estimated discharge flow rates, based on pumping capacity and the volume of water anticipated to be encountered at each area of excavation. Based on the results of the soils investigation, DEP does not anticipate soil contamination that would require additional remedial activities. See Allen Testimony, 12/18 Trans. at 152-53; Exh. DEP-48.

177. For treatment at 9 of the 11 locations, the dewatering wastewater from excavations and stockpiles will be directed to a settling basin for sediment removal. The treated water will then overflow to a stabilized swale prior to discharging to the receiving surface water. Drainage from the southern stockpile area is proposed to first pass through a layer of sand and into a filter-fabric wrapped perforated pipe for additional sediment removal before discharging to a settling basin. See Allen Testimony, 12/18 Trans. at 153; Exh. DEP-48.

178. The Applicant prepared a Soil Management Plan ("SMP") for the project, the purpose of which is to establish protocols for the management of soils generated during construction activities. In connection with the SMP, the Applicant collected soil samples from the Site, which were analyzed and summarized in a Soil Assessment Report. The soils were determined to be native soils, with isolated areas of clean fill. See Testimony of Mark E. LeMoine ("LeMoine Testimony"), 12/13 Trans. at 211-13; Exh. APP-36, 22.

179. With respect to soil assessments in the field, the SMP states that there will be an initial physical assessment performed to determine if any soils have been impacted by a release of pollutants. This assessment will include testing for various parameters including lead, volatile organic compounds and total petroleum hydrocarbons. If the soils meet the definition of native soils, they will be dewatered, stockpiled and then reused in different areas of the Site or disposed/reused off Site. If it appears the soils may have been impacted by a release, the soils will be segregated and analyzed further. Based on the type and level of contamination, the soils will be properly managed and disposed of off-site with DEP concurrence. See LeMoine Testimony, 12/13 Trans at 213, 215; Exh. APP-36.

180. Based on the soil analysis conducted by the Applicant, it is not anticipated that soil contamination requiring remedial action will be encountered at the Site. However, in the unlikely event that such contamination is encountered, the SMP requires that an environmental engineer be present on Site to oversee all excavations and ensure that any such contamination is addressed in accordance with all applicable permit conditions and regulations. If contamination is encountered, the SMP includes protocols to manage water that will drain from the contaminated soils. See LeMoine Testimony, 12/13 Trans at 217-18; Exh. APP-36.

181. The SMP is flexible and allows for management protocols to be amended. If dewatering phases are found to be inadequate, if there is more water than expected or if solids do not settle out as quickly as anticipated, the SMP can be amended to address these situations as they arise. See LeMoine Testimony, 12/13 Trans at 218; Exh. APP-36.

182. The Draft NPDES Permit addresses surface water discharge quality and establishes sampling protocols and sampling frequency requirements. See LeMoine Testimony, 12/13 Trans at 216; Exh. APP-36.

183. The Draft Permit requires monthly compliance sampling of dewatering wastewaters from the four areas of the property that will undergo construction: (1) the Runway 20 RSA; (2) the Taxiway B improvements; (3) the Runway 2 RSA; and (4) the secondary stockpile area to the south of the Airport. In addition, sediment controls associated with dewatering operations during tide gate renovation will be subject to daily inspections in accordance with Section 7(F) of the Draft Permit. The monitoring requirements, limits and conditions contained in the Draft Permit were determined by DEP using best professional judgment, as specified in R.C.S.A. §§ 22a-430-4(l) and (m), and are consistent with R.C.S.A. § 22a-430-4(s), the Connecticut Water Quality Standards and the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control. See Allen Testimony, 12/18 Trans. at 154; Exh. DEP-39, 48.

184. The Draft Permit also requires that stormwater runoff from the disturbed areas be directed through soil erosion and sediment controls designed, installed and maintained in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control and the conditions contained in Section 7 of the Draft Permit, which are consistent with the DEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities. The Applicant will inspect all areas disturbed by construction activities and inspect and maintain all erosion and sediment controls in accordance with the schedules contained in the Draft Permit See Allen Testimony, 12/18 Trans. at 154-55; Exh. DEP-48.

185. The proposed soil erosion and sediment controls, as detailed in the Design Drawing Set, were reviewed for compliance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control. See Allen Testimony, 12/18 Trans. at 153; Exh. DEP-48. The proposed erosion and sediment controls to treat the discharges will protect the waters of the State from pollution. See Exh. DEP-22.

186. The Draft Permit contains a compliance schedule that requires the Applicant to submit detailed effluent analysis on or before 30 days after initiation of dewatering discharges from each of the locations identified. The analyses will be used to verify projected discharge characteristics and to provide representative data necessary to further evaluate discharges, consistent with the Connecticut Water Quality Standards and the Water Quality Criteria, pursuant to 40 CFR Part 122.44(d). See Allen Testimony, 12/18 Trans. at 155; Exh. DEP-48.

187. The compliance schedule contains two analytical triggers that require the Applicant to take further actions to protect the waters of the State from pollution. If any discharge sample fails the aquatic toxicity test or exceeds a specified copper concentration in the permit, the Applicant must immediately stop the discharge at issue and submit a proposal for the Commissioner's review and written approval to further treat the wastewater prior to discharge to the receiving water. Upon approval of the Commissioner and implementation of any additional necessary treatment, the Applicant will be allowed to resume the discharge. The copper concentration trigger in the Draft Permit is based on the best professional judgment of the DEP

staff and was included because of the proximity of the Site to tidal areas and the toxicity of copper to salt water organisms at low concentrations. See Allen Testimony, 12/18 Trans. at 155-56; Exh. DEP-48.

188. The proposed activities are consistent with the policies articulated in the Coastal Management Act. See Zawoy Testimony, 12/18 Trans. at 66; Exh. APP-2; Allen Testimony, 12/18 Trans. at 153; Exh. DEP-48.

189. All concerns regarding endangered, threatened or special concern species on or near the Site have been adequately addressed. See Exh. DEP-48.

190. In October 2006, the Applicant submitted to DEP three comments regarding certain terms of the Draft NPDES Permit issued by DEP in August 2006. See Exh. APP-41. In particular, the Applicant expressed comments on permit terms concerning pH limitations and monitoring, aquatic toxicity testing protocols, and cessation of discharges in response to aquatic toxicity testing results.

191. In December 2006, DEP issued written responses to the Applicant's comments, clarifying certain permit terms and amending certain others. See Exh. DEP-49. These changes, which were specifically agreed to by the Applicant, were incorporated into a Revised Draft NPDES Permit. See Exh. DEP-39a.

192. In February 2007, DEP and the Applicant jointly submitted to the Hearing Officer a Motion to Open the Record for the limited purpose of allowing DEP to submit into the evidentiary record the Revised Draft NPDES Permit. See Department of Environmental Protection and Applicant Tweed-New Haven Airport Authority's Second Joint Motion to Open Record; Exh. DEP-39a.

193. The Bureau of Materials Management and Compliance Assurance has recommended that it be authorized to require the Applicant to submit detailed plans and specifications for the proposed controls, including but not limited to the following information:

1. Name(s) and address(es) of the contractor(s) chosen to undertake the construction activities.
2. The final proposed erosion and sediment control plan prepared by the contractor, including a detailed schematic of the dewatering sediment basins and swales, and any alternative treatment measures that may be utilized to achieve compliance with the proposed permit conditions.
3. A description of how wastewater discharge flows will be monitored and documented.
4. A proposed wastewater discharge sampling protocol, including locations to collect samples.

Upon written approval by the Commissioner, the Bureau has recommended that it be authorized to issue the Draft NPDES Permit. See Allen Testimony, 12/18 Trans. at 156-56; Exh. DEP-48.

VI. The Intervenor

194. On June 11, 2001, the East Haven/New Haven Committee for the Protection of Property Rights, Inc. ("Committee"), acting through Chairman Michael Criscuolo, submitted to DEP a Motion to Intervene in the proceeding pursuant to C.G.S. §22a-19(a). See Exh. APP-8.

195. On June 25, 2001, then DEP Commissioner Arthur J. Rocque, Jr. granted the Committee intervenor status. See Exh. APP-8.

196. Under C.G.S. § 22a-19(a), an intervenor has the burden of demonstrating, by a preponderance of the evidence, that the proposed activities "[have], or . . . [are] reasonably likely to have, the effect of unreasonably polluting, impairing or destroying the public trust in the air, water or other natural resources of the state." C.G.S. § 22a-19(a).

197. Under C.G.S. § 22a-19(b), if an intervenor demonstrates that the proposed activities are reasonably likely to cause unreasonable pollution, impairment or destruction of natural resources, the proposed activities will not be approved if "there is a feasible and prudent alternative consistent with the reasonable requirements of the public health, safety and welfare." C.G.S. § 22a-19(b).

198. The Committee did not submit any documentary evidence prior to or during the hearing nor did the Committee present any witness testimony during the hearing. See Transcripts of 12/12, 12/13 and 12/18.

VII. Public Participation

199. The EIS/EIE process, which began in the early 1990s, involved a series of scoping meetings to announce that the project had been proposed and soliciting from the public and state/federal agencies issues that should be examined. Three scoping sessions were held, beginning in April 1992. The EIS/EIE process also consisted of a substantial community participation portion involving a formal Planning Advisory Committee that held numerous meetings to identify and solicit public input related to the project and held broad-scale public information meetings. In addition, a formal public hearing associated with the Draft EIS was conducted by FAA in November 1999. Public comments were received and considered prior to publishing the FEIS. See Domas Testimony, 12/12 Trans. at 153-156; Silva Testimony, 12/12 Trans. at 44-45.

200. The Airport has undertaken considerable efforts to involve the public in Airport issues, including the proposed RSA project. A Neighborhood Liaison Committee was formed in the late 1990s and initially held monthly (and later bi-monthly) meetings at which the project was discussed. Also, the Authority held a monthly board meeting that was open to the public and at which the project was discussed at length and in detail. Members of the Applicant's project design/technical team were often in attendance and available to address questions or comments. There also was significant public involvement with developing the Airport Master Plan, of which the proposed project is Phase One. In 2000, there were two public hearings held concerning the Master Plan at which elements of the proposed activities were discussed at length. If members of the public had questions or comments regarding the proposed activities, they were addressed through these meetings. See Lamport Testimony, 12/12 Trans. at 92-97; 103-04.

201. On August 22, 2006, DEP issued a Notice of Tentative Determination indicating its intent to issue the requested permits and soliciting public comments on any aspect of the proposed activities. See Exh. APP-20.

202. On September 21, 2006, the Applicant conducted a Public Information Meeting regarding the project at Robinson Aviation in East Haven at which the project was explained and the public was invited to ask questions and make comments. See Exhs. DEP-20, APP-38.

203. After the Notice of Tentative Determination was issued in August 2006, written public comments were received by DEP and forwarded to the Applicant. The Applicant formulated written responses to all comments, provided its responses to DEP and later forwarded them directly to each commenter. DEP has concluded that the Applicant's responses adequately addressed the concerns raised in the comment letters. See Zawoy Testimony, 12/18 Trans. at 50; Exhs. APP-38, 129.

204. On November 5, 2006, DEP caused to be timely published in the New Haven Register a Notice of Public Hearing regarding the above-reference permit applications announcing a public hearing to be held on December 6, 12, 13 and 18, 2006. See Exhs. APP-128; DEP-44.

205. On December 6, 2006, a public hearing on the Applications was held at the Nathan Hale School in New Haven, Connecticut. See Transcript of 12/6/06. During this hearing, numerous members of the public made comments regarding the proposed activities and, in some circumstances, submitted additional written comment letters to the Hearing Officer. Many of the issues raised had been addressed by the Applicant in the application materials submitted to DEP and are part of the hearing record. Other issues were addressed by the Applicant during the December 12 and 13, 2006 hearing dates and include the following:

a. A comment was raised regarding the proposed location of the Runway 20 RSA and potential contamination of wells on Holmes Street resulting from the realignment of Dodge Avenue. During the EIS phase, the Applicant installed three monitoring wells in the Holmes Street area and monitored the groundwater table elevations over an extended period of time. The data demonstrated that the groundwater gradient runs away from Holmes Street, in a southwesterly direction, and that, as a result, any pollutants that may exist would drain away from the properties and any residential wells. See Domas Testimony, 12/12 Trans. at 149-151; Exh. APP-68.

b. A comment was raised regarding construction traffic impacts. During the EIS process, the Applicant evaluated impacts related to construction traffic and performed a construction impact analysis. The proposed construction traffic route runs through East Haven down to Coe Avenue, a four-lane state highway, onto Proto Drive, an industrial access road, and then onto the Site from Ora Avenue, an abandoned roadway. Construction traffic using this route will encounter very few residences or commercial properties. Once on the Site, construction traffic can access the Taxiway B area via Pig Farm Road, on which gravel will be temporarily placed to raise its elevation and support heavy construction equipment, and can access the Runway 2 RSA area via two temporary construction bridges over Morris Creek/Tuttle Brook. The Runway 20 RSA construction traffic will access the Site from Coe Avenue and Dodge Avenue. See Domas Testimony, 12/13 Trans. at 54-59; Exh. APP-68.

c. A comment was raised regarded the possibility of an increased mosquito population resulting from the wetland restoration plan. When working with the Applicant to develop the restoration plan, DEP specifically raised mosquito population concerns. The project was designed to avoid creating standing water and to establish water depths significant enough to deter mosquito breeding. In addition, the larger openings in the tide gate structure will result in an increased fish population in the restoration area - mosquito larvae are a main food source for fish. The restoration project is therefore expected to improve existing mosquito conditions. If, for some reason, the mosquito population did become an issue, the matter could be addressed in connection with the required 5 year monitoring program. See Zawoy Testimony, 12/18 Trans. at 77-78; Dennis Testimony, 12/13 Trans. at 185.

PROPOSED CONCLUSIONS OF LAW

1. The scope of the Hearing Officer's jurisdiction in this matter is limited to determining whether the proposed activities are consistent with all statutory and regulatory criteria applicable to the permit applications currently before DEP. The only relevant information upon which the Hearing Officer can rely in deciding whether to issue the requested permits is the contents of the record and the testimony elicited during the hearing relating to the proposed RSA and taxiway improvements. The Hearing Officer cannot consider extraneous matters including, specifically, any subsequent phases of the Airport Master Plan or activities associated therewith. See 12/6 Trans. at p. 4.

A. Programs Administered by the Office of Long Island Sound Programs

2. In accordance with C.G.S. §§ 22a-28 to 22a-35, § 22a-359 et seq, R.C.S.A. §§ 22a-30-1 to 22a-30-17 and 33 U.S.C. § 1341, the Applicant has submitted to DEP a complete Application for a Structures, Dredging & Fill and Tidal Wetlands Permit and 401 Water Quality Certificate.

3. Consistent with C.G.S. § 22a-6g, the Applicant publicly noticed the application in the New Haven Register, mailed notice to Mayor John DeStefano of New Haven and Mayor Joseph Maturo, Jr. of East Haven, and mailed to DEP a completed Certification of Notice Form.

4. DEP issued a Notice of Tentative Determinations/Notice of Public Information Meeting/Notice of Intent to Hold a Public Hearing regarding, inter alia, Application #200003049-KZ.

5. On September 21, 2006, the Applicant conducted a Public Information Meeting regarding the project at Robinson Aviation in East Haven at which the project was explained and the public was invited to ask questions and make comments.

6. A Public Hearing was duly held before Hearing Officer Janice Deshais on December 6, 12, 13 and 18, 2006.

7. The Applicant has satisfied all relevant statutory and regulatory criteria for the issuance of the requested permit, including the criteria set forth in R.C.S.A. §§ 22a-30-10(b) to (j). Specifically:

a. The Applicant has demonstrated that there are no feasible alternatives for accomplishing the Applicant's objectives that would further minimize adverse impacts and that all fill activities are no greater than necessary to accomplish the Applicant's objective of enhancing safety at the Airport. Several aspects of the project were specifically designed to minimize environmental impacts. There were some unavoidable impacts and, to compensate for these, the Applicant proposed an extensive wetland restoration program that will create and enhance approximately 57 acres of

existing wetlands to greater functional significance and enhance animal habitats. (R.C.S.A. § 22a-30-10(b));

b. The proposed activity will not affect recreational or navigational uses of waters of the State because all activity will occur on Airport property and, for reasons of public safety, public access to airport property is and will remain restricted. (R.C.S.A. § 22a-30-10(c));

c. The proposed activity will not cause unreasonable erosion or sedimentation of waters of the State. A comprehensive Erosion and Sedimentation Control plan, as well as a stormwater pollution prevention plan, will be implemented and maintained throughout construction. (R.C.S.A. § 22a-30-10(d));

d. The proposed activities will not result in significant adverse impacts on fisheries, shellfisheries or wildlife of the State. In fact, the proposed activity will result in a net increase in tidal waters/fish habitat, augmentation of wetland functions and fauna, a net increase in the geographic extent of coastal waters and enhancement of the functional significance of existing tidal wetlands. The mitigation program will considerably enhance the diversity and functioning of wildlife habitats on and off the Site. (R.C.S.A. § 22a-30-10(e));

e. The proposed activities will not result in a significant adverse impact on the circulation and quality of coastal or tidal waters of the State. In fact, the proposed activity, although involving relocation of sections of Morris Creek/Tuttle Brook, will not change existing overall drainage patterns. In addition, by allowing saline water to pass through the tide gates twice daily during high tide cycles, water circulation and quality will be markedly improved, resulting in an improvement of coastal and tidal waters. During construction, erosion and sediment controls and stormwater management measures will be implemented to protect water quality. (R.C.S.A. § 22a-30-10(f));

f. The proposed activities will not result in increased flood potential in surrounding areas. In fact, the proposed activities are likely to mitigate existing flooding problems by effecting a net increase in available flood storage. In addition, the new tide gates system will enable Airport personnel to control flood water elevations associated with both coastal and inland storm events by draining the wetlands in advance and increasing flood storage capacity. (R.C.S.A. § 22a-30-10(g));

g. The proposed activities will not result in an adverse impact to future water-dependent uses of the property. The coastal resources impacted by the project are all located on Airport property and no other proposed uses in these areas (other than airport-related uses) are feasible. For this reason, the

project will not result in adverse impacts to future water-dependent development opportunities. (R.C.S.A. § 22a-30-10(h));

h. The proposed activities do not involve extension of sewer or water services in tidal wetlands. (R.C.S.A. § 22a-30-10(i)); and

i. The proposed activities are not inconsistent with the policy of the State to discourage the construction or substantial expansion of existing airports on any wetlands. The project is a safety project, not a construction or expansion project. (R.C.S.A. § 22a-30-10(j)).

8. The Applicant has demonstrated that the proposed activities are consistent with the policies articulated in the Coastal Management Act, General Statutes §§ 22a-90 to 22a-112.

B. <u>Programs Administered by the Inland Water Resources Division</u>

9. In accordance with C.G.S. §§ 22a-36 to 22a-45, R.C.S.A. §§ 22a-39-1 to 22a-39-15 and 33 U.S.C. § 1341, the Applicant has submitted to DEP a complete Application for an Inland Wetland Permit, a Diversion Permit and a 401 Water Quality Certificate.

10. Consistent with C.G.S. § 22a-6g, the Applicant publicly noticed the application in the New Haven Register, mailed notice to Mayor John DeStefano of New Haven and Mayor Joseph Maturo, Jr. of East Haven, and mailed to DEP a completed Certification of Notice Form.

11. DEP issued a Notice of Tentative Determinations/Notice of Public Information Meeting/Notice of Intent to Hold a Public Hearing regarding, inter alia, Applications Nos. DIV-200003052, IW-2000-116 and WQC-200003051.

12. On September 21, 2006, the Applicant conducted a Public Information Meeting regarding the project at Robinson Aviation in East Haven at which the project was explained and the public was invited to ask questions and make comments.

13. A Public Hearing was duly held before Hearing Officer Janice Deshais on December 6, 12, 13 and 18, 2006.

14. The Applicant has satisfied all relevant statutory and regulatory criteria for the issuance of the requested permits, including the criteria set forth in C.G.S. § 22a-366. Specifically, the Applicant has demonstrated that the proposed diversion:

(a) is necessary;

(b) is compatible with long-range water resource planning, proper management and use of the water resources of Connecticut;
(c) is consistent with Connecticut's policy of protecting its citizens against harmful interstate diversions; and
(d) is consistent with the State Plan of Conservation and Development.

15. The Applicant also has satisfied the criteria set forth in R.C.S.A. §§ 22a-377(c)-2(f)(1) to (5). Specifically, the Applicant has demonstrated that the proposed diversion:

(a) is consistent with the standards, criteria, policies and water quality classifications for ground and surface water under C.G.S. § 22a-426;
(b) is consistent with the policies and requirements of chapter 440 of the General Statutes (Wetlands and Watercourses), and regulations thereunder;
(c) is designed and will be carried out so as to minimize and, if possible, eliminate flooding and flood hazards, and to be consistent with the policies and requirements of chapter 476a of the General Statutes (Flood Management), and regulations thereunder; and
(d) is consistent with the goals and policies of chapter 444 of the General Statutes (the Coastal Management Act); and is consistent with the relevant policies of the State Plan of Conservation and Development adopted under C.G.S. §§ 16a-24 to 16a-32.

16. The Applicant has demonstrated that the proposed activities are consistent with the policies articulated in the Coastal Management Act, General Statutes §§ 22a-90 to 22a-112.

17. The Applicant has demonstrated that the proposed activities are consistent with the state's flood management standards and regulations set forth in C.G.S. §§ 25-68b through 25-68h and R.C.S.A. §§ 25-68h-1 through 25-68h-3, such that the requested Flood Management Certification should be issued by DEP.

C. <u>NPDES Permit</u>

18. In accordance with C.G.S. §§ 22a-416 to 22a-438 and R.C.S.A. §§ 22a-430-1 to 22a-430-7, the Applicant has submitted to DEP a complete Permit Application for Wastewater Discharges to discharge stormwater and dewatering wastewaters associated with construction activities.

19. Consistent with C.G.S. § 22a-6g, the Applicant publicly noticed the application in the New Haven Register, mailed notice to Mayor John DeStefano of New Haven and Mayor Joseph Maturo, Jr. of East Haven, and mailed to DEP a completed Certification of Notice Form.

20. DEP issued a Notice of Tentative Determinations/Notice of Public Information Meeting/Notice of Intent to Hold a Public Hearing regarding, inter alia, Applications No. 200600317.

21. On September 21, 2006, the Applicant conducted a Public Information Meeting regarding the project at Robinson Aviation in East Haven at which the project was explained and the public was invited to ask questions and make comments.

22. A Public Hearing was duly held before Hearing Officer Janice Deshais on December 6, 12, 13 and 18, 2006.

23. The Applicant has satisfied all relevant statutory and regulatory criteria for the issuance of the requested permit. Specifically, in accordance with C.G.S. § 22a-430, R.C.S.A. §§ 22a-430-3 and 22a-430-4, and 33 U.S.C. § 1251, et seq., the Applicant has demonstrated that the proposed erosion and sediment controls to manage the discharge of stormwater and dewatering wastewaters during construction will protect the waters of the State from pollution.

24. The Applicant has demonstrated that the proposed activities are consistent with the policies articulated in the Coastal Management Act, General Statutes §§ 22a-90 to 22a-112.

D. The Intervenor

25. The Committee has failed to satisfy its burden under C.G.S. § 22a-19(a) of demonstrating that the proposed activities "[have], or . . . [are] reasonably likely to have, the effect of unreasonably polluting, impairing or destroying the public trust in the air, water or other natural resources of the state."

26. The Committee submitted no documentary evidence nor presented any testimonial evidence to support the facts alleged in its Petition to Intervene.

27. The documentary and testimonial evidence presented by the Applicant and DEP during the hearing demonstrate that the proposed activities are not reasonably likely to cause unreasonable pollution, impairment or destruction of the natural resources of the State and, to the contrary, demonstrate that the proposed activities will result in significant enhancement of these resources, including enhancement of the State's tidal wetlands, coastal waters, fish habitat, and wildlife habitat.

28. Because the Committee failed to satisfy its burden of demonstrating that the proposed activities are reasonably likely to cause unreasonable pollution, DEP is not obligated to consider alternatives to the proposed activities. Our case law makes clear that alternatives are only to be considered if the intervenor has first established unreasonable pollution. See Paige v. Planning & Zoning Commission, 235 Conn. 448, 462-63 (1995) ("by its plain terms, General Statutes § 22a-19(b) requires the consideration of alternative plans *only where* the [agency] first determines that it is reasonably likely that the project would cause unreasonable pollution") (emphasis added); Evans v. Glastonbury Planning & Zoning, 73 Conn. App. 647 (2002) ("once the [agency] made no finding of unreasonably impairment of natural resources, it no longer had an obligation to consider alternative plans"); Committee to Save Guilford Shoreline, Inc. v. Guilford Planning & Zoning, Superior Court, J.D. of New Haven, No. CV 03-0483939 (April 18, 2005, *Martin, J.*) (same); Groton Open Space v. Groton, Superior Court, J.D. of New London (same); Fromer v. Norwich Comm. on the City Plan, Superior Court, J.D. of New London, No.

CV 0531980 (August 28, 1998, *Solomon, J.*) (same).

29. Even assuming, arguendo, that the Committee had satisfied its burden of demonstrating that the proposed activities are reasonably likely to cause unreasonable pollution, impairment or destruction of the natural resources of the State, the record demonstrates that there is no "feasible and prudent alternative consistent with the reasonable requirements of the public health, safety and welfare." General Statutes § 22a-19(b). By contrast, the record reveals that numerous alternatives to the proposed activities were considered by both FAA and DEP but rejected as being infeasible and imprudent.

APPLICANT,
TWEED-NEW HAVEN AIRPORT AUTHORITY

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ATTACHMENT B

SECOND REVISED DRAFT PERMIT

Permit No: 200003049-KZ

Municipalities: New Haven and East Haven

Work Area: Morris Creek and Tuttle Brook at Tweed- New Haven Airport property located at 155 Burr Street

Permittee: Tweed-New Haven Airport Authority
155 Burr Street
New Haven, CT 06512

Pursuant to section 22a-359 through 22a-363f and section 22a-28 through 22a-35 of the Connecticut General Statutes ("CGS") and section 401 of the Federal Clean Water Act, as amended, and in accordance with CGS section 22a-98 and the Connecticut Water Quality Standards dated December 2002, a permit is hereby granted by the Commissioner of Environmental Protection ("Commissioner") to create runway safety areas at both ends of Runway 2/20, extend and rehabilitate existing Taxiway B, relocate portions of Morris Creek and Tuttle Brook, relocate a portion of Dodge Avenue, modify tide gate structures off Cart Road, and conduct approximately 57 acres of tidal wetland restoration/enhancement as is more specifically described below in the SCOPE OF AUTHORIZATION, in Morris Creek and Tuttle Brook off property identified as the "work area" above. The work area includes tidal wetlands along Morris Creek and Tuttle Brook.

*******NOTICE TO PERMITTEES AND CONTRACTORS*******

FAILURE TO CONFORM TO THE TERMS AND CONDITIONS OF THIS PERMIT MAY SUBJECT THE PERMITTEE AND ANY CONTRACTOR TO ENFORCEMENT ACTIONS, INCLUDING PENALTIES AND INJUNCTIONS, AS PROVIDED BY LAW.

SCOPE OF AUTHORIZATION

The Permittee is hereby authorized to conduct the following work as described in application #20003049-KZ, including 156 sheets of plans dated November 2005, April 2005 and January 2006 submitted by the Permittee to the Commissioner and attached hereto as follows:

Runway-2 Safety Area

1. temporarily install over Morris Creek an approximately 37-foot-wide by 80-foot-long access bridge over the existing abandoned bridge abutments at abandoned Ora Avenue of which approximately 50 linear feet of the superstructure of the temporary bridge will be located waterward of the high tide line as shown on drawing numbers WM-17.1 and WM-18 of the plans attached hereto as follows:

a. install approximately 60 linear feet of sheet pile cofferdam along the eastern and western bridge abutments described in paragraph 1., above;

b. remove approximately 450 cubic yards of existing bridge abutment located along the eastern and western embankments of the site;

c. restore the creek embankments and install approximately 450 cubic yards of fill material to grade the areas of the removed bridge abutments described in paragraph 1.b., above; and

d. install approximately 120 cubic yards of riprap over approximately 3,700 square feet over the fill areas described in paragraph 1.c. above to stabilize the area where the abutments were removed as described in paragraph 1.b., above;

2. temporarily install a second approximately 37-foot-wide by 80-foot-long long temporary access bridge over the newly realigned Morris Creek at Uriah Street to permit access between the runway safety area ("RSA") and the taxiway work areas east of Runway 2-20 as shown on drawings numbers RW2-8.2 and RW2-9.2 of the plans attached hereto;

3. temporarily place between Taxiway "B" and Ora Avenue approximately 1,800 cubic yards of fill material over 650 linear feet to construct an approximately 30' wide x 2' high haul road which shall include a temporary wetland crossing located adjacent to Ora Avenue constructed of approximately 10 cubic yards of clean fill over 150 square feet and three 24-inch diameter reinforced concrete pipes ("RCP") as shown on drawing numbers TWB-5.2, TWB-6.2, and TWB-8.2 of the plans attached hereto;

4. construct an approximately 500-foot-wide-by-1000-foot-long Runway-2 RSA as follows:

a. fill an approximately 0.50 acre area of the existing Morris Creek channel with 4,800 cubic yards of clean fill to construct a portion of the RSA;

b. excavate approximately 9.41 acres of existing tidal wetlands located south of the existing Runway-2 terminus to create an area for placing construction grade fill material;

c. fill the excavated area described in paragraph 4.b., above, with approximately 32,000 cubic yards of clean construction grade material to create the southern portion of the RSA and to provide space to support an approximately 10-foot by 12-foot Medium Intensity Airfield Lighting System Flashing ("MALSF") building and access area;

d. install within the filled areas described in paragraph 4.c., above, a approximately 22-foot-wide-by-27-foot-long gravel section containing an approximately 10-foot-wide by 12-foot-long MALSF building with concrete support walls, an approximately 10-foot-wide by 1,100-foot-long gravel maintenance road leading to the MALSF lights and MALSF building. The MALSF facility includes lights and light stanchions that vary in height from approximately 1 foot to 16 feet, 4-foot to 6-foot deep electrical manholes, and electrical feed lines as shown on drawing numbers RW2-5.2 and RW2-6.2 of the plans attached hereto; and

e. temporarily store excavated organic material from Runway-2 RSA for treated dewatering measures as shown on drawings numbers SEC-1, SEC-24, and SEC 27.1. of the plans attached hereto;

5. relocate Morris Creek at the southern end of the site from an area just south of the terminus of Runway-2 and connecting to existing Morris Creek at the terminus of the proposed MALSF access road described in paragraph 4.c., above, by excavating a total of approximately 30,000 cubic yards of material over 165,900 square feet, of which approximately 1,200 linear feet of such newly-created creek is located waterward of the high tide line as follows:

a. temporarily install approximately 50 linear feet of sheet piling located within the existing creek bed at the terminus of existing Runway-2 to temporarily block off existing Morris Creek water flows;

b. construct the new creek with a top of slope width of approximately 76 feet and a bottom slope width of approximately 46 feet providing for a 3:1 embankment slope on both sides of the new creek;

c. install slope protection erosion matting on both sides of the new creek embankments from the toe of the embankment slope to the top of slope and conduct tidal wetlands plantings through such erosion matting protection as shown on drawings numbers RW2-3.2, RW2-6.2, RW2-9.2 and RW2-12.2 of the plans attached hereto;

d. install approximately 350 cubic yards of 8-inch to 12-inch riprap over approximately 9,500 square feet located waterward of the high tide line on both sides of the southern terminus of the new creek in the area where the new creek merges with the existing Morris Creek bed;

e. construct an approximately 860-foot-long by 20-foot-wide gravel and soil maintenance access roadway located along the landward side of the new creek described in paragraph 5., above, of which approximately 400 linear feet of the accessway is located waterward of the high tide line as follows:

i. place approximately 550 cubic yards of fill to create the accessway containing a 3:1 slope along the creek side and a 2:1 slope along the upland side; and

ii. install three stormwater outlet discharge systems beginning on the landward side of the proposed maintenance access roadway described in paragraph 5.e., above, and terminating at the realigned section of Morris Creek described in paragraph 5., above, as follows: (1) install within the southernmost section of proposed realigned Morris Creek a catch basin with 4-foot sump leading to an 18-inch diameter RCP set on bedding material and containing a 7-foot-wide by 5-foot-long concrete headwall, an 18-inch diameter check valve, and approximately 640 square feet of 5-inch-diameter stone riprap outlet protection within the creek; (2) rehabilitate an existing 12-inch diameter RCP located within the approximate middle of proposed realigned Morris Creek by constructing a 7-foot-wide by 5-foot-long concrete headwall with a 12-inch diameter check valve, and approximately 640 square feet of 5-inch-diameter stone riprap outlet protection within the creek; and (3) install within the northernmost end of the proposed realigned Morris Creek one catch basin with 4-foot sump leading to 12-inch diameter RCP set on bedding material and containing a 7-foot-wide-by-5-foot-long concrete headwall, a 12-inch diameter check valve, and approximately 640 square feet of 5-inch-diameter stone riprap outlet protection within the creek;

6. place approximately 100 cubic yards of 5-inch riprap over approximately 2,700 square feet along the western embankment of existing Morris Creek located approximately 200 feet east of the proposed MALSF building;

7. construct approximately 4-foot-wide low-lying soil berms to elevation 4.5 feet NGVD on both sides of existing Morris Creek and adjacent to the existing Runway-2 glideslope area for a total of approximately 600 linear feet on the western side and approximately 900 linear feet on the eastern side of the creek containing 3:1 horizontal/vertical slopes as follows:

a. place approximately 430 cubic yards of clean fill material over an approximately 16,000 square foot area waterward of the high tide line to create the soil berms described in paragraph 7., above;

b. place approximately 6,000 square feet of slope stabilization erosion control matting atop the toe of slope and landward of the soil berms described in paragraph 7., above; and

c. install six discharge points to convey stormwater from the upland side of the soil berms described in paragraph 7., above, to the existing Morris Creek as follows:

i. excavate and backfill to the elevation of the surrounding grade an approximately 4-foot-wide by 50-foot-long trench to install approximately 40 linear feet of 15-inch diameter RCP containing a 15-inch flared end section, a 3-foot-wide by 5-foot-high concrete headwall, a 15-inch diameter boot valve and approximately 25 square feet of 5-inch riprap outlet protection located on the western berm section adjacent to the Morris Causeway culverts;

ii. excavate and backfill to the elevation of the surrounding grade an approximately 4-foot-wide by 38-foot-long trench to install approximately 28 linear feet of 12-inch diameter RCP containing a 12-inch flared end section, a 3-foot-wide by 5-foot-high concrete headwall, a 12-inch diameter boot valve and approximately 25 square feet of 5-inch riprap outlet protection located on the western berm section, approximately 100 feet southwest of the existing glideslope building;

iii. excavate and backfill to the elevation of the surrounding grade an approximately 4-foot-wide by 30-foot-long trench to install 20 linear feet of 12-inch diameter RCP containing a 12-inch flared end section, a 3-foot-wide by 5-foot-high concrete headwall, a 12-inch diameter boot valve and approximately 20 square feet of 5-inch riprap outlet protection located on the western berm section located approximately 200 feet southeast of the 3rd residence on the right along Morris Causeway, traveling in a northeasterly direction;

iv. excavate and backfill to the elevation of the surrounding grade an approximately 4-foot-wide by 110-foot-long trench to install 100 linear feet of 12-inch diameter RCP containing a 12-inch flared end section, a 3-foot-wide by 5-foot-high concrete headwall, a 12-inch diameter boot valve and approximately 20 square feet of 5-inch riprap outlet protection located on the eastern berm section adjacent to the intersection of South End Road and Morris Causeway;

v. excavate and backfill to the elevation of the surrounding grade an approximately 4-foot-wide by 86-foot-long trench to install 76 linear feet of 15-inch diameter RCP containing a 15-inch flared end section, a 3-foot-wide by 5-foot-high concrete headwall, a 15-inch diameter boot valve and approximately 20 square feet of 5-inch riprap outlet protection located on the eastern berm section adjacent to intersection of South End Road and Morris Causeway; and

vi. excavate and backfill to the elevation of the surrounding grade an approximately 4-foot-wide by 38-foot-long trench to install 28 linear feet of 12-inch diameter RCP containing a 12-inch flared end section, a 3-foot-wide by 5-foot-high concrete headwall, a 12-inch diameter boot valve and approximately 20 square feet of 5-inch riprap outlet protection located on the eastern berm section adjacent to the New Haven sewage pump station;

Taxiway Bravo

8. rehabilitate and extend portions of Taxiway Bravo located along the eastern side of Runway-2 as follows:

   a. excavate approximately 3,500 cubic yards of organic material in areas waterward of the high tide line, in a location beginning approximately 200 linear feet north of proposed Taxiway Juliet and ending approximately 900 linear feet south of proposed Taxiway Juliet and as shown on drawing numbers TWB-3.2, TWB-6.2, TWB-9.2, TWB-10, TWB-11.1 and TWB-12 through TWB-20 of the plans attached hereto;

   b. place approximately 610 cubic yards of sub-base, base, structural and wearing pavement layers waterward of the high tide line to reconstruct Taxiway Bravo;

   c. install approximately 270 linear feet of perimeter lights and related power lines in conduits along the taxiway fill described in paragraph 8.a., above;

   d. place approximately 650 linear feet of 5-inch riprap with filter fabric over an approximately 13,000 square foot area waterward of the high tide line at the western bank of the channel adjacent to the taxiway extension, as shown on drawings numbers TWB-2.2 and TWB-3.2 of the plans attached hereto; and

   e. place approximately 2,550 cubic yards of fill to elevation 5.5 feet NGVD in areas waterward of the high tide line and place paving for the taxiway extension, located in a line beginning approximately 200 linear feet North of proposed Taxiway Juliet and ending approximately 900 linear feet south of proposed Taxiway Juliet and as shown on drawing numbers TWB-3.2, TWB-6.2, TWB-9.2, TWB-10, TWB-11.1 and TWB-12 through TWB-20 of the plans attached hereto;

9. excavate and backfill approximately 10 cubic yards of material to install a 24-inch diameter stormwater outlet pipe at invert elevation 0.0 feet NGVD containing a scour pad constructed of approximately 6 cubic yards of riprap over approximately 280 square feet located approximately 130 feet south of the temporary haul road described in paragraph 3., above;

10. excavate, cut, remove, and cap approximately 300 linear feet of existing drainage outfall pipe servicing a total of four existing drainage outfalls located along the last 200 feet (running in a southerly direction) of existing Taxiway Bravo and construct a single 18-inch diameter RCP outfall pipe at invert elevation -0.9 feet NGVD located adjacent to Taxiways Bravo and Juliet as follows:

    a. excavate approximately 60 cubic yards of material over 260 square feet to install 60 linear feet of 18-inch diameter RCP outfall pipe;

    b. construct an approximately 5-foot-high by 8-foot-long concrete headwall to support the landward terminus of the outfall pipe described in paragraph 10.a., above; and

    c. install approximately 10 cubic yards of riprap over 270 square feet to construct a scour pad at the waterward terminus of the outfall pipe described in paragraph 10., above;

Runway-20 Safety Area

11. construct an approximately 500-foot-wide by 1000-foot-long Runway-20 RSA with localizer building, localizer antenna array, DME antenna and paved access service road as follows:

    a. fill approximately 1,400 linear feet of existing Tuttle Brook channel over 0.94 acres with approximately 21,300 cubic yards of clean fill to construct the RSA;

    b. excavate approximately 24,000 cubic yards of upland area to install twin 584-foot-long by 24-foot-wide by 6.5-foot-high concrete culverts with concrete footings at invert elevation approximately 2.21 feet NGVD within the upland and beneath the RSA described in paragraph 11. above, containing approximately 25-foot-wide by 6'-to-12'-high concrete wingwalls on both the downstream and upstream faces of the culverts;

    c. install within the creek bed and embankments of the downstream side of the culverts and within the realigned section of Morris Creek described in paragraph 12., below, approximately 70 cubic yards of riprap over approximately 2,475 square feet;

    d. install within the creek bed and embankments of the upstream side of the culverts and within the realigned section of Tuttle Brook approximately 310 cubic yards of riprap over approximately 4,120 square feet;

    e. construct an approximately 7-foot-wide by 3-foot-high outfall culvert by installing an approximately 32-foot-wide by 8-foot-high concrete headwall and approximately 50 cubic yards of riprap over approximately 1,800 square feet to create a scour pad through the proposed Runway-20 RSA and terminating in the realigned section of Morris Creek described in paragraph 12., below;

f. install approximately 50 linear feet of new concrete-encased telephone duct bank underneath the proposed Morris Creek alignment, located approximately 50 feet south of where the proposed creek crosses the existing centerline of Dodge Avenue, as shown on DWG. No. RW20-3.2.; and

g. install approximately 150 linear feet of underground power lines in conduits and approximately 50 linear feet of 30-inch sewer line with 12 inches of concrete encasement underneath the proposed Morris Creek alignment, located both ends of the proposed culvert, as shown on DWG. No. RW 20-5.3.;

12. realign existing Morris Creek by breaching an opening to existing Morris Creek just north of the northernmost existing culvert running through the airport terminal area, and construct within the upland area approximately 1,320 linear feet of approximately 40-foot wide meandering tidal creek (excluding the 584-foot length of the culverts described in paragraph 11.b., above), as shown on drawing numbers RW20-3.2 and RW20-6.3, that will connect to the concrete culverts described in paragraph 11.b. above, and line areas landward of the realigned Morris Creek with approximately 207,000 square feet of slope stabilization erosion matting and conduct tidal wetlands plantings as shown on drawing numbers RW-20-3.2 of the plans attached hereto;

Tide Gates

13. remove and replace the existing wooden tide gate structures located adjacent to Cart Road in Morris Creek as follows:

a. install a temporary porta-dam on both the upstream and downstream sides of the existing tide gates to conduct dewatering of the area as shown on drawing numbers SEC-16 through SEC-18 of the plans attached hereto;

b. conduct re-grouting of approximately 100 linear feet of existing tide gate abutments located along the eastern and western embankments of the site;

c. remove and replace three existing trash racks and frames located along the upstream side of the existing tide gate structure;

d. remove the existing wooden flap valves, wooden supporting structure and structural elements from the three bays of the existing tide gates formed by the existing concrete abutments and replace such structures with three 6-foot-high by 10-foot-wide tide gate frames and gates, two gates being motor-operated and one being a simple flap valve;

e. install within and atop the tide gate structures handrails, steel grating, two electric motors and an 8-foot-high security fence with a 4-foot-wide pedestrian walkway as shown on drawings numbers WM-24 through WM-31 of the plans attached hereto;

f. install approximately 180 linear feet of new security fence atop the concrete abutments of the tide gate structures;

g. place a total of approximately 250 cubic yards of riprap over approximately 6,000 square feet along both the embankments and within the river bottom of both the upstream and downstream sides of the existing tide gate structure as shown on drawings numbers WM-24 and WM-25 of the plans attached hereto; and

h. install two water pressure sensors/transmitters along both the upstream and downstream sides of the tide gate structure; and

Wetlands Enhancement/Restoration

14. conduct tidal wetland enhancement and restoration of approximately 56.66 acres of existing and new tidal wetlands by removing *Phragmites* vegetation within all work areas authorized herein containing heavy stands of *Phragmites* using low ground pressure track-mounted equipment with a spray tower and remove such dead strands of vegetation by cutting and mulching and by modifying the existing tide gate structures described in paragraph 13., above, to allow for tidal waters to flood Tweed-New Haven Airport and several adjacent properties to elevation 3.5 feet NGVD, including the installation and enhancement of tidal creeks within two main sections of the site: one adjacent to Dean Street and the other adjacent to Ora Avenue and east of Taxiway B as follows:

a. install eight approximately 20-foot-wide-by-40-foot-long temporary bridge crossings to access the work sites with heavy equipment as shown on drawing numbers WM-1.1 through WM-9.2 of the plans attached hereto;

b. install two temporary drainage ditch crossings with three 24-inch diameter concrete pipes with approximately 150 square feet of filter fabric and approximately 100 cubic yards of 6-inch gravel/stone fill running along the sides of Ora Avenue as shown on drawing number TWB-8.2 of the plans attached hereto;

c. utilize low ground pressure track-mounted equipment to remove approximately 2,500 cubic yards of organic material from areas adjacent to Dean Street and *Phragmites* vegetation from approximately 4,100 linear feet of tidal channels and restore such channels to a width of approximately 10 feet and a depth of approximately -1.5 feet NGVD, and construct a total of approximately 2,500 linear feet of new 10-foot-wide tidal channels to elevation approximately -2.0 feet NGVD as shown on drawings numbers WM-6.2 and WM-9.2 of the plans attached hereto;

d. utilize low ground pressure track-mounted equipment to remove approximately 1,200 cubic yards of organic material from areas adjacent to Ora Avenue and east of the proposed Taxiway Bravo extension and *Phragmites* vegetation from approximately 1,700 linear feet of tidal channels and restore such channels to a width of approximately 10 feet and a depth of approximately -1.5 feet NGVD, and construct a total of approximately 3,300 linear feet of new approximately 10-foot-wide tidal channels to elevation approximately -2.0 feet NGVD as shown on drawing numbers WM-2.2 and TWB-3.2 of the plans attached hereto;

e. install two water pressure sensors/transmitters with electric lines on the opposite side of Eden Street and on the upstream and downstream sides of an existing 4-barrel concrete culvert at Morris Causeway; and

f. install flexible boot check valves on seven existing, 12-inch drainage outfalls on the western bank of Morris Creek adjacent to Dean Street, as shown on DWG No. SEC-40.

UPON INITIATION OF ANY WORK AUTHORIZED HEREIN, THE PERMITTEE ACCEPTS AND AGREES TO COMPLY WITH ALL TERMS AND CONDITIONS OF THIS PERMIT.

SPECIAL TERMS AND CONDITIONS

1. Except as specifically authorized by this permit, no equipment, material or debris shall be deposited, placed or stored in any tidal wetland or watercourse, nor shall any tidal wetland or watercourse be used as a staging area or accessway other than as provided herein.

2. Prior to the completion of the work authorized herein, the Permittee shall remove the temporary fill associated with the construction of the haul road authorized in the SCOPE OF AUTHORIZATION paragraph 3., above, to the pre-existing conditions and elevations. Such work shall include the removal of all drainage structures and materials, and in any area where backfill is required to achieve pre-existing grades, the Permittee shall utilize on-site stockpiled organic material or the Planting Material as described in SPECIAL TERMS AND CONDITIONS paragraph 29., below. In addition, any such restored area shall be planted with native salt tolerant wetland species from an off-site source.

3. Prior to the discharge of stormwater from the two proposed outfall pipes described in the SCOPE OF AUTHORIZATION paragraphs 9. and 10., above, the Permittee shall install the vegetated stormwater swale containing catch basins and check dams located west of Taxiway "B" and south of Taxiway "J" as shown on drawing numbers TWB-2.2 and TWB-5.2 of the plans attached hereto.

4. Prior to the initiation of the work authorized herein, the Permittee shall submit for the review and written approval of the Commissioner a stormwater maintenance plan for

the stormwater swale and catch basin structures. Such plan shall include: a schedule for the inspection and clean out of each identified stormwater device; an outline for the maintenance protocol for each device or technique proposed to be utilized for the pre-treatment of stormwater; and the name and contact information of the person or position who will be responsible for maintaining the devices or techniques to be utilized.

5. All temporary bridges authorized pursuant to the SCOPE OF AUTHORIZATION paragraphs 1. and 2., above, shall be removed upon completion of the project and all areas shall be restored to their pre-work condition unless otherwise authorized herein.

6. The Permittee shall complete each of the tide gate and wetland restoration activities as described in the SCOPE OF AUTHORIZATION paragraphs 13. and 14., above, in their entirety, prior to the expiration of this authorization.

7. The Permittee shall conduct the tidal wetland plantings in accordance with tables in drawing numbers RW2-14 and RW20-18 at locations within the relocated Morris Creek and Tuttle Brook as shown on drawing numbers RW2-3.2, RW2-5.1, RW2-9.2, RW2-12.2, RW20-3.2 and RW20-6.3 of the plans attached hereto.

8. The Permittee shall only use plant source material that is native to Long Island Sound to complete the tidal wetland plantings described in SPECIAL TERMS AND CONDITIONS paragraph 7., above. Prior to the commencement of work authorized herein, the Permittee shall provide to the Commissioner the company name and address of the source of plant material intended to be utilized within the mitigation area. The Permittee shall notify the Commissioner of any intended change in the source of plant material.

9. The Permittee shall conduct monitoring of the tidal wetland restoration area described in the SCOPE OF AUTHORIZATION paragraph 14., above, for a period no less than 5 years. Such monitoring shall consist of the submission of a semi-annual monitoring report for the first two growing seasons and an annual monitoring report for the following three growing seasons to the Commissioner for review and written approval. The first such monitoring report must be submitted no later than December 15th of any year and shall contain at a minimum the following information: 1) locations of all control stakes used for restoration monitoring purposes; 2) location of a control salt marsh reference site; 3) background and current salinity values for the control and reference sites; 4) a photographic record of both the control and reference site pre- and post-construction; 5) the dates work on mitigation site began and ended; 6) description of monitoring inspections that occurred since the last report; 7) remedial actions taken

during the monitoring year, such as: removing debris, adjustments made to tide gates, replanting, controlling invasive plant species, applying additional herbicide, or adjusting hydrology, etc; 8) visual estimates of percent cover of tidal wetland grasses versus *Phragmites* grasses at the established control sites; 9) percent survival of tidal wetland plantings; 10) plan for removal of additional invasive plant species, if required; 11) status and condition of all erosion control measures within the mitigation area; 12) general health and vigor of the surviving plants; and 13) remedial measures recommended to achieve or maintain the proposed functions and values of the mitigation sites. The Permittee shall immediately implement any additional remedial recommendations that may be prescribed by the Commissioner in writing. If the Commissioner determines following the 5 year monitoring program that the approved mitigation plan has not been successful, the Permittee shall submit a plan to achieve success at this site or application to conduct off-site tidal wetland creation/restoration of approximately 11.24 acres of land. Such restoration work shall be completed within 2 years of approval of any plan approval or authorization.

10. The Permittee shall for a minimum of two (2) years following completion of the mitigation/restoration work described in SCOPE OF AUTHORIZATION paragraph 14., above, undertake the following within the mitigation areas, if and as necessary: 1) replace dead or missing plant species which have not already been compensated for by a suitable volunteer species, and 2) repair existing or establish new erosion control measures. The Permittee shall submit to the Commissioner no later than December 15th of any year documentation indicating whether any such work was required and, if so, when completed.

11. Prior to the filling of Morris Creek adjacent to Runway-2, all low marsh tidal wetland vegetation consisting of *Spartina alterniflora* and other suitable species will be removed and transplanted to the relocated Morris Creek adjacent to the Runway-2 RSA. Such removal and transplanting will be coordinated and conducted in such a manner that the individual plants will not stay out of the ground for a period exceeding 48 hours. Care must be taken to ensure that all *Spartina alterniflora* and other suitable species plants are relocated to the same habitat type (e.g. elevation, water exposure, etc.) from which they were removed.

12. The Permittee shall utilize the recommended aquatic label glyphosate approved by the DEP Pesticide Division for the mortality of the *Phragmites* vegetation described in the SCOPE OF AUTHORIZATION paragraph 14., above.

13. The Permittee shall utilize low ground pressure track-mounted equipment that does not exceed 3 pounds per square inch (psi) on the marsh surface for the spraying of Rodeo, cutting/mulching of *Phragmites* vegetation, creation of meandering tidal creeks and removal of excavated marsh material as described in the SCOPE OF AUTHORIZATION paragraph 14., above. The Permittee may utilize low ground pressure mats for the construction of tidal creek channels provided the mats are specified for generating a total ground pressure that does not exceed 3 psi. Prior to the utilization of any low ground pressure mats, the Permittee shall submit to the Commissioner for review and written approval the specifications for such matting and the weights of equipment to be utilized.

14. Prior to the completion of the work authorized herein, the Permittee shall seed disturbed land adjacent to the reconstructed/extended Taxiway Bravo, disturbed lands east and west of the Runway-20 RSA, the area to be disturbed immediately northwest of the Runway-2 RSA and the RSAs themselves with a mixture of "warm seasonal grasses" consisting of 60 percent little bluestem, 20 percent indiangrass and 20 percent switchgrass, making up approximately 23 acres of new or enhanced grassland habitat. Within 30 days of completing the grass seeding, the Permittee shall submit for the review and written approval of the Commissioner a mowing plan for the 23 acres of grassland noted above. The Permittee shall conduct mowing of these grassland areas in accordance with the approved plan unless otherwise authorized in writing by the Commissioner.

15. At no time shall the Permittee modify the surfaces of the RSAs described in the SCOPE OF AUTHORIZATION paragraphs 4. and 11., above, including but not limiting to paving, unless otherwise authorized pursuant to a permit issued by the Commissioner.

16. In the event of that a significant weather event is forecast that may cause coastal flooding, the Permittee may close the two motorized tide gate structures described in the SCOPE OF AUTHORIZATION paragraph 14.d., above, for a period not to exceed 48 hours in any single event.

17. Prior to the commencement of work authorized herein to repair and modify the tide gates structures described in the SCOPE OF AUTHORIZATION paragraph 13., above, the Permittee shall install the porta-dam structure described in the SCOPE OF AUTHORIZATION paragraph 13.a., above. Such porta-dam structure shall be maintained in optimal operating condition to prevent sedimentation from entering the

waterway until the work authorized herein has been completed. Should the Permittee determine that an alternative enclosure device is appropriate, the Permittee may submit in writing to the Commissioner a request to utilize a different device. Such change may not be implemented without written approval from the Commissioner.

18. Prior to the initiation of the work authorized herein, the Permittee shall submit to the Commissioner a signed Memorandum of Understanding that establishes an operating and funding agreement between the Permittee and the City of New Haven concerning the construction, operation and maintenance of the tide gate structure and related appurtenances. Such memorandum will establish the ownership of the tide gates, who will be responsible for the daily and emergency operation of the gates, how the tide gates will be maintained in the event that Tweed-New Haven Airport or any successor is no longer in operation, who will be responsible for the maintenance of the tide gate structure and related appurtenances and from which source(s) maintenance funding will flow. Maintenance personnel of the City of New Haven and/or the Tweed-New Haven Airport Authority and/or their contractors are authorized under this permit to maintain the Tuttle Brook/Morris Creek channel and tide gate structure and related appurtenances, with such maintenance to include, but not be limited to, the following activities: 1) removal of debris/flotsam collected by the tide gate trash racks; 2) repair/reinstallation of erosion control matting and/or plantings along the creek banks consistent with this permit; 3) removal of debris/flotsam from the creek channel itself; and 4) minor repairs to the tide gate structure and related appurtenances, including the water pressure sensors/transmitters.

19. Prior to the commencement of work authorized herein, the Permittee shall obtain all applicable permits from the Department of Environmental Protection for any water discharges into the New Haven Harbor in accordance with sections 22a-430 and 22a-430(b) of the Connecticut General Statutes.

20. The Permittee shall line all areas of the relocated Morris Creek with erosion control matting as shown on drawing numbers RW2-3.2, RW2-6.2, RW2-9.2, RW2-12.2, RW20-3.2, RW20-6.3 and TWB-3.2 of the plans attached hereto. The erosion control matting shall be designed to stabilize the designed/constructed slopes. All erosion control matting must be maintained in optimal operating condition until the site has stabilized.

21. All temporary fill or disturbed areas created by the work authorized herein must be restored to their pre-work conditions including reestablishing all original contours and revegetated with suitable vegetation and/or erosion control matting or materials.

22. The Permittee may discharge any pumped dewatering wastewater within the dewatering area as shown on drawing number SEC-16 of the plan attached hereto, provide that such dewatering area is constructed on the upland landward of the high tide line and outside tidal wetlands. The Permittee shall maintain the dewatering area in optimal operating condition and shall not allow any unfiltered water carrying sediments to discharge into Morris Creek.

23. The Permittee shall not store equipment, construction materials or clean or repair any machinery within 25 feet of a tidal wetland or tidal watercourse.

24. A complete copy of this permit, including its drawings, special conditions and any amendments, shall be maintained at the work site whenever work is being performed. The Permittee shall assure that all contractors, subcontractors and other personnel performing the authorized work are fully aware of all permit terms and conditions.

25. The Permittee shall comply with all the terms and conditions of the Soil and Sediment Control Plan dated January, 2001 for the Runway Safety Area & Taxiway Improvements Project and shall implement and maintain the soil erosion and sediment control measures as detailed in drawing numbers SEC-1 through SEC-43 of the plans attached hereto;

26. Prior to the in-water construction work authorized in the SCOPE OF AUTHORIZATION paragraphs 5., 11. and 15., the Permittee shall install silt control curtains within the confines of Morris Creek as shown on sheets SEC-3, SEC-6, SEC-7, SEC-13 and SEC-14 of the attached drawings. The Permittee shall maintain such silt control curtains in optimal operating conditions until the work authorized herein has been completed and the areas have stabilized.

27. The Permittee shall not allow the release of any fine particles into the waterway to reconstruct the tide gate structures authorized in the SCOPE OF AUTHORIZATION paragraph 13., above, during the shellfish spawning period of June 1st through September 30th of any year. If the Permittee detects elevated levels of fines being released into the waterway during this timeframe of June 1st through September 30th , the Permittee shall immediately stop all work on-site and shall not recommence until erosion control measures or confinement structure have been repaired and are operational.

28. Upon completion of the tidal wetland mitigation work described in the SCOPE OF AUTHORIZATION paragraph 14., above, the Permittee shall place a minimum of 500 bushels of cultch directly downstream of the reconstructed tide gate structures described in the SCOPE OF AUTHORIZATION paragraph 13., above. Prior to initiation of the placement of the cultch, the Permittee shall contact the Department of Agriculture/Bureau of Aquaculture to arrange for use of shellfish scow capable of accessing and depositing the shell material at the site.

29. All backfill material authorized herein must be of an organic nature either excavated from the site or of a manmade planting substrate (“Planting Material”) containing no

less that 75% sand by weight and with an organic content no less than 10% and no more than 15%. The Planting Material must be analyzed by USDA-approved methodology for organic matter by loss-ignition of oven-dried samples dried at 105 degrees centigrade. The mineral fraction must be analyzed to determine weight percentage of sand, as determined after passing a 2-millimeter sieve. Sand particles are defined to be between 0.05 and 2.0 millimeters in diameter. The Planting Material soil must be free of seed and roots of invasive species and inspected and approved by the Connecticut Department of Transportation Office of Environmental Planning prior to its use.

30. Prior to the commencement of work authorized herein, the Permittee shall record a copy of this permit on the land records in the Clerk's Office in the municipalities of East Haven and New Haven. Confirmation of such recording must be submitted to the Commissioner for review and written approval prior to commencement of work.

31. In the event that the Permittee or any successor does not maintain an operational airport at the site, the Permittee or any successor shall, within 60 days of the termination of such operations, submit a closure plan to the Commissioner, for review and approval, to address the presence of the fill authorized in the SCOPE OF AUTHORIZATION, paragraph 4. above. The closure plan, approval of which shall be within the sole discretion of the Commissioner, shall present an evaluation of alternatives regarding the presence of the fill authorized in the SCOPE OF AUTHORIZATION, paragraph 4. above, including but not limited to the environmental and economic impacts and estimated cost of removal of such fill and restoration of the RSA-2 area to pre-construction condition.

GENERAL TERMS AND CONDITIONS

1. All work authorized by this permit shall be completed within five years from date of issuance of this permit ("work completion date") in accordance with all conditions of this permit and any other applicable law.

   a. The Permittee may request a two-year extension of the work completion date. Such request shall be in writing and shall be submitted to the Commissioner at least 30 days prior to said work completion date. Such request shall describe the work done to date, work which still needs to be completed and the reason for such extension. The Commissioner shall grant or deny such request in her sole discretion.

   b. Any work authorized herein conducted after said work completion date or any authorized two year extension thereof is a violation of this permit and may subject the Permittee to enforcement action, including penalties, as provided by law.

2. In conducting the work authorized herein, the Permittee shall not deviate from the attached plans, as may be modified by this permit. The Permittee shall not make de minimis changes from said plans without prior written approval of the Commissioner.

3. On or before (a) 90 days after completion of the work authorized herein, or (b) upon expiration of the work completion date or any authorized two year extension thereof, whichever is earlier, the Permittee shall submit to the Commissioner as-built drawings prepared and sealed by a licensed engineer, licensed surveyor or licensed architect, as applicable, of the work area showing all contours, bathymetries, tidal datums and structures.

4. Not later than two weeks prior to the commencement of any work authorized herein, the Permittee shall submit to the Commissioner, on the form attached hereto as Appendix A, the name(s) and address(es) of any contractor(s) employed to conduct such work and the expected date for commencement and completion of such work.

5. The Permittee shall maintain all structures or other work authorized herein in good condition. Any such maintenance shall be conducted in accordance with applicable law including, but not limited to, CGS sections 22a-28 through 22a-35 and CGS sections 22a-359 through 22a-363f.

6. The Permittee shall notify the Commissioner in writing of the commencement of any work and completion of all work authorized herein no later than three days prior to the commencement of such work and no later than seven days after the completion of such work.

7. The Permittee shall dispose of aquatic sediments in accordance with the terms and conditions of this permit. All waste material generated by the performance of the work authorized herein shall be disposed of by the Permittee at an upland site approved for the disposal of such waste material, as applicable.
8. In undertaking the work authorized hereunder, the Permittee shall not cause or allow pollution of wetlands or watercourses, including pollution resulting from sedimentation and erosion. For purposes of this permit, "pollution" means "pollution" as that term is defined by CGS section 22a-423.

9. Any document required to be submitted to the Commissioner under this permit or any contact required to be made with the Commissioner shall, unless otherwise specified in writing by the Commissioner, be directed to:

   Permit Section
   Office of Long Island Sound Programs
   Department of Environmental Protection
   79 Elm Street
   Hartford, Connecticut 06106-5127
   (860) 424-3034
   Fax # (860) 424-4054

10. The date of submission to the Commissioner of any document required by this permit shall be the date such document is received by the Commissioner. The date of any notice by the

Commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" as used in this permit means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or a Connecticut or federal holiday shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or a Connecticut or federal holiday.

11. The work specified in the SCOPE OF AUTHORIZATION is authorized solely for the purpose set out in this permit. No change in the purpose or use of the authorization work or facilities as set forth in this permit may occur without the prior written authorization of the Commissioner. The Permittee shall, prior to undertaking or allowing any change in use or purpose from that which is authorized by this permit, request authorization from the Commissioner for such change. Said request shall be in writing and shall describe the proposed change and the reason for the change.

12. This permit may be revoked, suspended, or modified in accordance with applicable law.

13. This permit is not transferable without prior written authorization of the Commissioner. A request to transfer a permit shall be submitted in writing and shall describe the proposed transfer and the reason for such transfer. The Permittee's obligations under this permit shall not be affected by the passage of title to the work area to any other person or municipality until such time as a transfer is authorized by the Commissioner.

14. The Permittee shall allow any representative of the Commissioner to inspect the work authorized herein at reasonable times to ensure that it is being or has been accomplished in accordance with the terms and conditions of this permit.

15. In granting this permit, the Commissioner has relied on representations of the Permittee, including information and data provided in support of the Permittee's application. Neither the Permittee's representations nor the issuance of this permit shall constitute an assurance by the Commissioner as to the structural integrity, the engineering feasibility or the efficacy of such design.

16. In the event that the Permittee becomes aware that he did not or may not comply, or did not or may not comply on time, with any provision of this permit or of any document required hereunder, the Permittee shall immediately notify the Commissioner and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the Commissioner, the Permittee shall state in writing the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and the Permittee shall comply with any dates which may be approved in writing by the Commissioner. Notification by the Permittee shall not excuse noncompliance or delay and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically stated by the Commissioner in writing.

17. In evaluating the application for this permit the Commissioner has relied on information and data provided by the Permittee and on the Permittee's representations concerning site conditions, design specifications and the proposed work authorized herein, including but not limited to representations concerning the commercial, public or private nature of the work or structures authorized herein, the water-dependency of said work or structures, its availability for access by the general public, and the ownership of regulated structures or filled areas. If such information proves to be false, deceptive, incomplete or inaccurate, this permit may be modified, suspended or revoked, and any unauthorized activities may be subject to enforcement action.

18. The Permittee may not conduct work waterward of the high tide line or in tidal wetlands at this permit site other than the work authorized herein, unless otherwise authorized by the Commissioner pursuant to CGS section 22a-359 et. seq. and/or CGS section 22a-32 et. seq.

19. The issuance of this permit does not relieve the Permittee of his obligations to obtain any other approvals required by applicable federal, state and local law.

20. Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this permit shall be signed by the Permittee and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense."

21. This permit is subject to and does not derogate any present or future property rights or powers of the State of Connecticut, and conveys no property rights in real estate or material nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the property or activity affected hereby.

Issued on _____, 2007.

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

_____

Gina McCarthy

Commissioner

Permit Application No. 20003049-KZ
Tweed-New Haven Airport Authority
KZ/ko

OFFICE OF LONG ISLAND SOUND PROGRAMS

APPENDIX A

TO: Permit Section
Department of Environmental Protection
Office of Long Island Sound Programs
79 Elm Street
Hartford, CT 06106-5127

PERMITTEE: Tweed New Haven Airport Authority
Lawrence DeNardis
155 Burr Street
New Haven, CT 06512

Permit No: 20003049-KZ, New Haven/East Haven

CONTRACTOR 1: _____

Address: _____

_____

Telephone #: _____

CONTRACTOR 2: _____

Address: _____

_____

Telephone #: _____

CONTRACTOR 3: _____

Address: _____

_____

Telephone #: _____

EXPECTED DATE OF COMMENCEMENT OF WORK: _____

EXPECTED DATE OF COMPLETION OF WORK: _____

PERMITTEE: _____
(signature) (date)

ATTACHMENT C

DRAFT PERMIT dated 10/12/06

PERMITTEE: Tweed-New Haven Airport Authority
155 Burr Street
New Haven, CT 06512

PERMIT NOS.: IW-2000-116, DIV-200003052 & WQC-200003051
TOWN(S): East Haven & New Haven
WATERS: Morris Creek/Tuttle Brook & Inland Wetlands

Pursuant to Connecticut General Statutes Sections 22a-39 and 22a-368, the Tweed-New Haven Airport Authority (the "permittee") is hereby authorized to conduct activities within inland wetlands and watercourses and divert the waters of the State, and pursuant to Section 401 of the Federal Clean Water Act (33USC 1341) Water Quality Certification is hereby issued to the permittee for the discharge(s) of material into waters of the State in accordance with the applications referenced above and filed with this Department on November 7, 2000 and described herein. The purpose of said activities is to implement a series of safety improvements to Runway 2/20 and Taxiways ‘B’ and ‘E’ at the existing airport property. (the "site").

AUTHORIZED ACTIVITY

Specifically, the permittee is authorized to conduct the following activities: (1) the filling and excavation of approximately 0.24 acres of inland wetlands to construct the southern section of the new Morris Creek/Tuttle Brook channel, a maintenance roadway, stormwater utilities and perimeter fence at the southwestern portion of the site, and the installation stormwater utilities immediately east of Taxiway ‘B’; (2) the temporary filling of approximately 0.66acres of inland wetlands to install a haul road between Taxiway ‘B’ and Ora Avenue; and (3) the filling and re-grading of approximately 2,600 feet of the existing Morris Creek/Tuttle Brook channel and the construction of 3,780 feet of new channel, including approximately 550 feet of channel enclosed within twin 24’ wide x 6.5’ high arch culverts, to facilitate the implementation of the safety improvements to Runway 2/20 and Taxiways ‘B’ and ‘E’ at the site. All activities shall be conducted in accordance with site plans entitled, “Runway Safety Area & Taxiway Improvements, Tweed New Haven Airport,” revision dated March 22, 2006, and prepared by HTA Consulting Engineers.

Said discharge(s) will comply with the applicable provisions of Section 301, 302, 303, 306 and 307 of said Act and will not violate Connecticut's Water Quality Standards.

PERMITTEE'S FAILURE TO COMPLY WITH THE TERMS AND CONDITIONS OF THIS PERMIT SHALL SUBJECT PERMITTEE AND PERMITTEE'S CONTRACTOR(S) TO ENFORCEMENT ACTIONS AND PENALTIES AS PROVIDED BY LAW.

SPECIAL CONDITIONS

1. **Grassland Bird Management Plan.** The permittee shall provide in writing for review and approval to the Department within 60 days of the issuance of this permit, a long-term management plan for the airport property with the goal of preserving and maintaining habitat for grassland bird species, including the Horned Lark (Eremophila alpestris), Grasshopper Sparrow (Ammodramus savannarum) and Savannah Sparrow (Passerculus sandwichensis).

2. **Taxiway 'B' Haul Road Wetland Restoration Plan.** The permittee shall provide in writing to the Department within 60 days of the issuance of this permit, a plan to restore the 27,900 +/- square feet of inland wetland temporarily filled by the haul road between Taxiway 'B' and Ora Avenue. The wetland restoration plan should include, but not be limited to: removal of temporary fill, soil preparation, herbaceous wetland seed mix application and a shrub/sapling planting plan, which includes Fraxinus pennsylvanica (Green Ash), Salix nigra (Black Willow), Clethra alnifolia (Sweet Pepperbush), Cornus amomum (Silky Dogwood), Viburnum dentatum (Northern Arrowwood) and Sambucus canadensis (Common Elderberry), and a monitoring plan.

GENERAL CONDITIONS

1. The permittee shall notify the Commissioner in writing two weeks prior to: (A) commencing construction or modification of structures or facilities authorized herein; and (B) initiating the diversion authorized herein.

2. The permittee may not make any alterations, except de minimis alterations, to any structure, facility, or activity authorized by this permit unless the permittee applies for and receives a modification of this permit in accordance with the provisions of section 22a-377(c)-2 of the Regulations of Connecticut State Agencies. Except as authorized by subdivision (5) of section 22a-377(b)-1(a) of the Regulations of Connecticut State Agencies, the permittee may not make any de minimis alterations to any structure, facility, or activity authorized by this permit without written permission from the Commissioner. A de minimis alteration means an alteration which does not significantly increase the quantity of water diverted or significantly change the capacity to divert water.

3. All structures, facilities, or activities constructed, maintained, or conducted pursuant hereto shall be consistent with the terms and conditions of this permit, and any structure, facility or activity not specifically authorized by this permit, or exempted pursuant to section 22a-377 of the General Statutes or section 22a-377(b)-1 of the Regulations of Connecticut State Agencies, shall constitute a violation hereof which may result in modification, revocation or suspension of this permit or in the institution of other legal proceedings to enforce its terms and conditions.

4. Unless the permittee maintains in optimal condition any structures or facilities authorized by this permit, the permittee shall remove such structures and facilities and restore the affected waters to their condition prior to construction of such structures or facilities.

5. In issuing this permit, the Commissioner has relied on information provided by the permittee. If such information was false, incomplete, or misleading, this permit may be modified, suspended or revoked and the permittee may be subject to any other remedies or penalties provided by law.

6. If construction of any structures or facilities authorized herein is not completed within three years of issuance of this permit or within such other time as may be provided by this permit, or if any activity authorized herein is not commenced within three years of issuance of this permit or within such other time as may be provided by this permit, this permit shall expire three years after issuance or at the end of such other time.

7. This permit is subject to and does not derogate any rights or powers of the State of Connecticut, conveys no property rights or exclusive privileges, and is subject to all public and private rights and to all applicable federal, state, and local law. In constructing or maintaining any structure or facility or conducting any activity authorized herein, the permittee may not cause pollution, impairment, or destruction of the air, water, or other natural resources of this State. The issuance of this permit shall not create any presumption that this permit should be renewed.

8. In constructing or maintaining any structure or facility or conducting any activity authorized herein, or in removing any such structure or facility under paragraph 4 hereof, the permittee shall employ best management practices to control storm water discharges, to prevent erosion and sedimentation, and to otherwise prevent pollution of wetlands and other waters of the State. The permittee shall immediately inform the Commissioner of any adverse impact or hazard to the environment which occurs or is likely to occur as the direct result of the construction, maintenance, or conduct of structures, facilities, or activities authorized herein.

9. This permit is not transferable without the prior written consent of the Commissioner.

10. **Expiration of Permit.** This 401 Water Quality Certificate shall expire upon the expiration of the U.S. Army Corps of Engineers (USACOE) Section 404 permit for the same activity. The Water Diversion and Inland Wetland and Watercourses permits shall expire five (5) years from the date of issuance.

11. **Certification of Documents**. Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this permit shall be signed by the permittee or a responsible corporate officer of the permittee, a general partner of the permittee, and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:

"I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachment may be punishable as a criminal offense in accordance with Section 22a-376 under 53a-157 of the Connecticut General Statutes."

12. **Best Management Practices.** In constructing or maintaining the activities authorized herein, the permittee shall employ best management practices, consistent with the terms and conditions of this permit, to control storm water discharges and erosion and sedimentation and to prevent pollution. Such practices to be implemented by the permittee at the site include, but are not necessarily limited to:

    a. Prohibiting dumping of any quantity of oil, chemicals or other deleterious material on the ground;

    b. Immediately informing the Commissioner's Oil and Chemical Spill Section at 424-3338 of any adverse impact or hazard to the environment, including any discharges, spillage or loss of oil or petroleum or chemical liquids or solids, which occurs or is likely to occur as the direct or indirect result of the activities authorized herein;

    c. Separating staging areas at the site from the regulated areas by silt fences or haybales at all times.

    d. Prohibiting storage of any fuel and refueling of equipment within 25 feet from any wetland or watercourse.

    e. Preventing pollution of wetlands and watercourses in accordance with the document "Connecticut Guidelines for Soil Erosion and Sediment Control" as

revised. Said controls shall be inspected by the permittee for deficiencies at least once per week and immediately after each rainfall and at least daily during prolonged rainfall. The permittee shall correct any such deficiencies within forty eight (48) hours of said deficiencies being found.

f. Stabilizing disturbed soils in a timely fashion to minimize erosion. If a grading operation at the site will be suspended for a period of thirty (30) or more consecutive days, the permittee shall, within the first seven (7) days of that suspension period, accomplish seeding and mulching or take such other appropriate measures to stabilize the soil involved in such grading operation. Within seven (7) days after establishing final grade in any grading operation at the site the permittee shall seed and mulch the soil involved in such grading operation or take such other appropriate measures to stabilize such soil until seeding and mulching can be accomplished.

g. Prohibiting the storage of any materials at the site which are buoyant, hazardous, flammable, explosive, soluble, expansive, radioactive, or which could in the event of a flood be injurious to human, animal or plant life, below the elevation of the five-hundred (500) year flood. Any other material or equipment stored at the site below said elevation by the permittee or the permittee's contractor must be firmly anchored, restrained or enclosed to prevent flotation. The quantity of fuel stored below such elevation for equipment used at the site shall not exceed the quantity of fuel that is expected to be used by such equipment in one day.

h. Immediately informing the Commissioner's Inland Water Resources Division (IWRD) of the occurrence of pollution or other environmental damage resulting from construction or maintenance of the authorized activity or any construction associated therewith in violation of this permit. The permittee shall, no later than 48 hours after the permittee learns of a violation of this permit, report same in writing to the Commissioner. Such report shall contain the following information:

(i) the provision(s) of this permit that has been violated;

(ii) the date and time the violation(s) was first observed and by whom;

(iii) the cause of the violation(s), if known

(iv) if the violation(s) has ceased, the duration of the violation(s) and the exact date(s) and times(s) it was corrected;

(v) if the violation(s) has not ceased, the anticipated date when it will be corrected;

(vi) steps taken and steps planned to prevent a reoccurrence of the violation(s) and the date(s) such steps were implemented or will be implemented;

(vii) the signatures of the permittee and of the individual(s) responsible for actually preparing such report, each of whom shall certify said report in accordance with section 9 of this permit.

For information and technical assistance, contact the Department of Environmental Protection's Inland Water Resources Division at (860)424-3019.

13. **Contractor Liability.** The permittee shall give a copy of this permit to the contractor(s) who will be carrying out the activities authorized herein prior to the start of construction and shall receive a written receipt for such copy, signed and dated by such contractor(s). The permittee's contractor(s) shall conduct all operations at the site in full compliance with this permit and, to the extent provided by law, may be held liable for any violation of the terms and conditions of this permit.

14. **Monitoring and Reports to the Commissioner.** The permittee shall record all actions taken pursuant to Condition Number 12(e) of this permit and shall, on a monthly basis, submit a report of such actions to the Commissioner. This report shall indicate compliance or noncompliance with this permit for all aspects of the project which is the subject of this permit. The report shall be signed by the environmental inspector assigned to the site by the permittee and shall be certified in accordance with Condition Number 11 above. Such monthly report shall be submitted to the Commissioner no later than the 15th of the month subsequent to the month being reported. The permittee shall submit such reports until the subject project is completed.

15. **Submission of Documents**. Any document or notice required to be submitted to the Commissioner under this permit shall, unless otherwise specified in writing by the Commissioner, be directed to:

Director
DEP/Inland Water Resources Division
79 Elm Street
Hartford, CT 06106-5127

The date of submission to the Commissioner of any document required by this permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this permit, including but not limited to notice of approval or

disapproval on any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" as used in this permit means any calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.

This authorization constitutes the permit required by section 22a-368(b) of the Connecticut General Statutes.

Issued as a permit of the Commissioner of Environmental Protection on .

Gina McCarthy
Commissioner

ATTACHMENT D

NPDES PERMIT

issued to

Tweed-New Haven Airport Authority
Administration Bldg
155 Burr Street
New Haven, Connecticut 06512

Location Address:
155 Burr Street
New Haven, CT 06512

Facility ID: 093-292

Permit ID: CT0030457

Receiving Stream: Morris Creek

Permit Expires:

SECTION 1: GENERAL PROVISIONS

(A) This permit is issued in accordance with section 22a-430 of Chapter 446k, Connecticut General Statutes ("CGS"), and Regulations of Connecticut State Agencies ("RCSA") adopted thereunder, as amended, and section 402(b) of the Clean Water Act, as amended, 33 USC 1251, et. seq., and pursuant to an approval dated September 26, 1973, by the Administrator of the United States Environmental Protection Agency for the State of Connecticut to administer an N.P.D.E.S. permit program.

(B) Tweed-New Haven Airport Authority, ("Permittee"), shall comply with all conditions of this permit including the following sections of the RCSA which have been adopted pursuant to section 22a-430 of the CGS and are hereby incorporated into this permit. Your attention is especially drawn to the notification requirements of subsection (i)(2), (i)(3), (j)(1), (j)(6), (j)(8), (j)(9)(C), (j)(10)(C), (j)(11)(C), (D), (E), and (F), (k)(3) and (4) and (l)(2) of section 22a-430-3.

Section 22a-430-3 General Conditions

(a) Definitions
(b) General
(c) Inspection and Entry
(d) Effect of a Permit
(e) Duty
(f) Proper Operation and Maintenance
(g) Sludge Disposal
(h) Duty to Mitigate
(i) Facility Modifications; Notification
(j) Monitoring, Records and Reporting Requirements
(k) Bypass
(l) Conditions Applicable to POTWs
(m) Effluent Limitation Violations (Upsets)
(n) Enforcement

(o) Resource Conservation
(p) Spill Prevention and Control
(q) Instrumentation, Alarms, Flow Recorders
(r) Equalization

Section 22a-430-4 Procedures and Criteria

(a) Duty to Apply
(b) Duty to Reapply
(c) Application Requirements
(d) Preliminary Review
(e) Tentative Determination
(f) Draft Permits, Fact Sheets
(g) Public Notice, Notice of Hearing
(h) Public Comments
(i) Final Determination
(j) Public Hearings
(k) Submission of Plans and Specifications. Approval.
(l) Establishing Effluent Limitations and Conditions
(m) Case by Case Determinations
(n) Permit issuance or renewal
(o) Permit Transfer
(p) Permit revocation, denial or modification
(q) Variances
(r) Secondary Treatment Requirements
(s) Treatment Requirements for Metals and Cyanide
(t) Discharges to POTWs - Prohibitions

(C) Violations of any of the terms, conditions, or limitations contained in this permit may subject the Permittee to enforcement action including, but not limited to, seeking penalties, injunctions and/or forfeitures pursuant to applicable sections of the CGS and RCSA.

(D) Any false statement in any information submitted pursuant to this permit may be punishable as a criminal offense under section 22a-438 or 22a-131a of the CGS or in accordance with section 22a-6, under section 53a-157b of the CGS.

(E) The authorization to discharge under this permit may not be transferred without prior written approval of the Commissioner of Environmental Protection ("Commissioner"). To request such approval, the Permittee and proposed transferee shall register such proposed transfer with the Commissioner, at least 30 days prior to the transferee becoming legally responsible for creating or maintaining any discharge which is the subject of the permit transfer. Failure, by the transferee, to obtain the Commissioner's approval prior to commencing such discharge(s) may subject the transferee to enforcement action for discharging without a permit pursuant to applicable sections of the CGS and RCSA.

(F) No provision of this permit and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by the Permittee pursuant to this permit will result in compliance or prevent or abate pollution.

(G) Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.

(H) An annual fee shall be paid for each year this permit is in effect as set forth in section 22a-430-7 of the Regulations of Connecticut State Agencies.

(I) This permitted discharge is consistent with the applicable goals and policies of the Connecticut Coastal Management Act (section 22a-92 of the Connecticut General Statutes).

SECTION 2: DEFINITIONS

(A) The definitions of the terms used in this permit shall be the same as the definitions contained in section 22a-423 of the CGS and section 22a-430-3(a) and 22a-430-6 of the RCSA, except for "No Observable Acute Effect Level (NOAEL)" which is redefined below.

(B) In addition to the above, the following definitions shall apply to this permit:

"Best management practices" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs include, without limitation, treatment practices, operating procedures, and practices to control runoff, spillage or leaks, sludge disposal or waste disposal, or drainage from raw material storage.

"Construction activities" means activities including but not limited to clearing and grubbing, grading, excavation and dewatering.

"Critical Test Concentration (CTC)" means the specified effluent dilution at which the Permittee is to conduct a single-concentration Aquatic Toxicity test.

"Daily Concentration" means the concentration of a substance as measured in a daily composite sample, or, the arithmetic average of all grab sample results defining a grab sample average.

"Daily Quantity" means the quantity of waste discharged during an operating day.

"Dewatering wastewater" means wastewater generated from the lowering of the groundwater table, the pumping of accumulated stormwater from an excavation, the pumping of surface water from a cofferdam, or the pumping of other surface water that has been diverted into the construction site.

"Guidelines" means the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, or as may be amended, established pursuant to section 22a-328 of the Connecticut General Statutes.

"Instantaneous Limit" means the highest allowable concentration of a substance as measured by a grab sample, or the highest allowable measurement of a parameter as obtained through instantaneous monitoring.

"In stream Waste Concentration (IWC)" means the concentration of a discharge in the receiving water after mixing has occurred in the allocated zone of influence.

"Maximum Daily Limit", means the maximum allowable "Daily Concentration" (defined above) when expressed as a concentration (e.g. mg/l); otherwise, it means the maximum allowable "Daily Quantity" as defined above, unless it is expressed as a flow quantity. If expressed as a flow quantity it means "Maximum Daily Flow" as defined in section 22a-430-3(a) of the RCSA.

"NA" as a Monitoring Table abbreviation means "not applicable".

"NR" as a Monitoring Table abbreviation means "not required".

"No Observable Acute Effect Level (NOAEL)" means any concentration equal to or less than the critical test concentration in a single concentration (pass/fail) toxicity test conducted pursuant to section 22a-430-3(j)(7)(A)(i) RCSA, demonstrating greater than 50% survival of test organisms in 100% (undiluted) effluent and 90% or greater survival of test organisms at the CTC.

"Stormwater" means waters consisting of precipitation runoff.

"ug/l" means micrograms per liter.

SECTION 3: COMMISSIONER'S DECISION

(A) The Commissioner has issued a final determination and found that the proposed erosion and sediment control systems to treat the discharges will protect the waters of the state from pollution. The Commissioner's decision is based on Application No. 200600317 for permit issuance received on February 10, 2006 and the administrative record established in the processing of that application.

(B) The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit, the above referenced application, and all approvals issued by the Commissioner or the Commissioner's authorized agent for the discharges and/or activities authorized by, or associated with, this permit.

(C) The Commissioner reserves the right to make appropriate revisions to the permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the Federal Clean Water Act or the CGS or regulations adopted thereunder, as amended. The permit as modified or renewed under this paragraph may also contain any other requirements of the Federal Clean Water Act or CGS or regulations adopted thereunder which are then applicable.

SECTION 4: GENERAL EFFLUENT LIMITATIONS

(A) No discharge shall contain, or cause in the receiving stream, a visible oil sheen or floating solids or cause visible discoloration or foaming in the receiving stream.

(B) No discharge shall cause acute or chronic toxicity in the receiving water body beyond any zone of influence specifically allocated to that discharge in this permit.

(C) The temperature of any discharge shall not increase the temperature of the receiving stream above 83^{o}F or, in any case, raise the temperature of the receiving stream by more than 4^{o}F. The incremental temperature increase in coastal and marine waters is limited to 1.5^{o}F during the period including July, August and September.

SECTION 5: SPECIFIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(A) The discharges shall not exceed and shall otherwise conform to the specific terms and conditions listed below. The discharges are restricted by, and shall be monitored in accordance with, the table(s) below:

Table A

Discharge Serial Number: 101-1 and 102-1 | **Monitoring Location: 1**

Wastewater Description: Dewatering wastewaters from excavations and stockpiles during construction of Runway 20 Safety Area at the north end of site

Monitoring Location Description: Discharge from dewatering sedimentation basin (sample from either basin) [5]

PARAMETER	**UNITS**	***FLOW/TIME BASED MONITORING***				**INSTANTANEOUS MONITORING**			**Minimum Level Test**
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency [1]	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency	Sample Type or measurement to be reported	
Aquatic Toxicity[4], Daphnia pulex NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aquatic Toxicity[4], Pimephales promelas NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aquatic Toxicity[4], Mysidopsis bahia NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aquatic Toxicity[4], Cyprinodon variegatus NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aluminum, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Arsenic, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Biochemical Oxygen Demand (BOD)	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	
Copper, Dissolved	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Copper, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Flow, Total	gpd	NA	-----	Monthly	Daily Flow	NA	NR	NA	
Iron, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	
Lead, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Nickel, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Oil and Grease, Total	mg/l	NA	NA	NR	NA	10.0	Monthly	Grab	
Polyaromatic Hydrocarbons (PAHs)	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
pH	S.U.	NA	NA	NR	NA	6.0 – 9.0	Monthly	Grab	
Total Suspended Solids	mg/l	NA	NA	NR	NA	30.0	Monthly	Grab	
Turbidity	NTU	NA	NA	NR	NA	-----	Monthly	Grab	X
Zinc, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X

Table Footnotes and Remarks:
Footnotes:

[1] For this parameter the Permittee shall maintain at the facility a record of the total flow for each day of discharge from both discharge locations. The Permittee shall report on the DMR the Maximum Daily Flow for the month for the sampled location.

[2] The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.

[3] Minimum Level Test refers to Section 6(A) of this permit.

[4] The results of the Toxicity Tests shall be recorded in % on the Discharge Monitoring Report (DMR). See Section 6(B) of this permit for Toxicity Test information. For the aquatic toxicity test species that was not utilized during the Toxicity Test, the Permittee shall write "Monitoring Conditional" on the DMR.

[5] The Permittee shall identify on the DMR which discharge was sampled. For the location that was not sampled, the Permittee shall write "Monitoring Conditional" on the DMR.

Remarks:

See Section 10: Compliance Schedule for additional sampling requirements.

Table B									
Discharge Serial Number: 103-1 and 104-1						**Monitoring Location: 1**			
Wastewater Description: Dewatering wastewaters from excavations and stockpiles during construction of Taxiway B improvements at east side of site									
Monitoring Location Description: Discharge from dewatering sedimentation basin (sample from either basin) [5]									
PARAMETER	**UNITS**	***FLOW/TIME BASED MONITORING***				**INSTANTANEOUS MONITORING**			**Minimum Level Test**
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency [1]	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency	Sample Type or measurement to be reported	
Aquatic Toxicity[4], Daphnia pulex NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aquatic Toxicity[4], Pimephales promelas NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aquatic Toxicity[4], Mysidopsis bahia NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aquatic Toxicity[4], Cyprinodon variegatus NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aluminum, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Arsenic, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Biochemical Oxygen Demand (BOD)	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	
Copper, Dissolved	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Copper, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Flow, Total	gpd	NA	-----	Monthly	Daily Flow	NA	NR	NA	
Iron, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	
Lead, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Nickel, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Oil and Grease, Total	mg/l	NA	NA	NR	NA	10.0	Monthly	Grab	
Polyaromatic Hydrocarbons (PAHs)	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
pH	S.U.	NA	NA	NR	NA	6.0 – 9.0	Monthly	Grab	
Total Suspended Solids	mg/l	NA	NA	NR	NA	30.0	Monthly	Grab	
Turbidity	NTU	NA	NA	NR	NA	-----	Monthly	Grab	X
Zinc, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X

Table Footnotes and Remarks:
Footnotes:

[1] For this parameter the Permittee shall maintain at the facility a record of the total flow for each day of discharge from both discharge locations. The Permittee shall report on the DMR the Maximum Daily Flow for the month for the sampled location.

[2] The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.

[3] Minimum Level Test refers to Section 6(A) of this permit.

[4] The results of the Toxicity Tests shall be recorded in % on the Discharge Monitoring Report. See Section 6(B) of this permit for Toxicity Test information. For the aquatic toxicity test species that was not utilized during the Toxicity Test, the Permittee shall write "Monitoring Conditional" on the DMR.

[5] The Permittee shall identify on the DMR which discharge was sampled. For the location that was not sampled, the Permittee shall write "Monitoring Conditional" on the DMR.

Remarks:

See Section 10: Compliance Schedule for additional sampling requirements.

Table C									
Discharge Serial Number: 105-1 through 109-1						**Monitoring Location: 1**			
Wastewater Description: Dewatering wastewaters from excavations and stockpiles during construction of Runway 2 Safety Area at the south end of site									
Monitoring Location Description: Discharge from dewatering sedimentation basin (sample from any one basin) [5]									
PARAMETER	**UNITS**	***FLOW/TIME BASED MONITORING***				**INSTANTANEOUS MONITORING**			**Minimum Level Test**
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency [1]	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency	Sample Type or measurement to be reported	
Aquatic Toxicity[4], Daphnia pulex NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aquatic Toxicity[4], Pimephales promelas NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aquatic Toxicity[4], Mysidopsis bahia NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aquatic Toxicity[4], Cyprinodon variegatus NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aluminum, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Arsenic, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Biochemical Oxygen Demand (BOD)	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	
Copper, Dissolved	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Copper, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Flow, Total	gpd	NA	-----	Monthly	Daily Flow	NA	NR	NA	
Iron, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	
Lead, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Nickel, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Oil and Grease, Total	mg/l	NA	NA	NR	NA	10.0	Monthly	Grab	
Polyaromatic Hydrocarbons (PAHs)	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
pH	S.U.	NA	NA	NR	NA	6.0 – 9.0	Monthly	Grab	
Total Suspended Solids	mg/l	NA	NA	NR	NA	30.0	Monthly	Grab	
Turbidity	NTU	NA	NA	NR	NA	-----	Monthly	Grab	X
Zinc, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X

Table Footnotes and Remarks:
Footnotes:

[1] For this parameter the Permittee shall maintain at the facility a record of the total flow for each day of discharge from all discharge locations. The Permittee shall report on the DMR the Maximum Daily Flow for the month for the sampled location.

[2] The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.

[3] Minimum Level Test refers to Section 6(A) of this permit.

[4] The results of the Toxicity Tests shall be recorded in % on the Discharge Monitoring Report. See Section 6(B) of this permit for Toxicity Test information. For the aquatic toxicity test species that was not utilized during the Toxicity Test, the Permittee shall write "Monitoring Conditional" on the DMR.

[5] The Permittee shall identify on the DMR which discharge was sampled. For the location that was not sampled, the Permittee shall write "Monitoring Conditional" on the DMR.

Remarks:

See Section 10: Compliance Schedule for additional sampling requirements.

Table D	
Discharge Serial Number: 110-1	**Monitoring Location: Not applicable**
Wastewater Description: Dewatering wastewaters from tide gate reconstruction cofferdam	
Monitoring Location Description: no sampling required	
Remarks: The discharge from the dewatering basin shall be inspected on a daily basis while the discharge is occurring and an inspection log maintained in accordance with Section 7(F) of this permit.	

Table E									
Discharge Serial Number: 111-1						**Monitoring Location: 1**			
Wastewater Description: Dewatering wastewaters from soil stockpiles at the secondary soil dewatering site at the south end of site									
Monitoring Location Description: Discharge from dewatering sedimentation basin									
PARAMETER	**UNITS**	***FLOW/TIME BASED MONITORING***				**INSTANTANEOUS MONITORING**			**Minimum Level Test**
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency [1]	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency	Sample Type or measurement to be reported	
Aquatic Toxicity[4], Daphnia pulex NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aquatic Toxicity[4], Pimephales promelas NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aquatic Toxicity[4], Mysidopsis bahia NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aquatic Toxicity[4], Cyprinodon variegatus NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aluminum, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Arsenic, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Biochemical Oxygen Demand (BOD)	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	
Copper, Dissolved	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Copper, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Flow, Total	gpd	NA	-----	Monthly	Daily Flow	NA	NR	NA	
Iron, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	
Lead, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Nickel, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
Oil and Grease, Total	mg/l	NA	NA	NR	NA	10.0	Monthly	Grab	
Polyaromatic Hydrocarbons (PAHs)	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X
pH	S.U.	NA	NA	NR	NA	6.0 – 9.0	Monthly	Grab	
Total Suspended Solids	mg/l	NA	NA	NR	NA	30.0	Monthly	Grab	
Turbidity	NTU	NA	NA	NR	NA	-----	Monthly	Grab	X
Zinc, Total	mg/l	NA	NA	NR	NA	-----	Monthly	Grab	X

Table Footnotes and Remarks:
Footnotes:

[1] For this parameter the Permittee shall maintain at the facility a record of the total flow for each day of discharge and shall report the Maximum Daily Flow for each month.

[2] The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.

[3] Minimum Level Test refers to Section 6(A) of this permit.

[4] The results of the Toxicity Tests shall be recorded in % on the Discharge Monitoring Report. See Section 6(B) of this permit for Toxicity Test information. For the aquatic toxicity test species that was not utilized during the Toxicity Test, the Permittee shall write "Monitoring Conditional" on the DMR.

Remarks:
See Section 10: Compliance Schedule for additional sampling requirements.

Table F	
Discharge Serial Number: 112-1	**Monitoring Location: Not applicable**
Wastewater Description: Stormwater runoff from construction areas	
Monitoring Location Description: No sampling required	

Remarks:

Disturbed areas and erosion and sediment controls shall be inspected on a weekly basis and an inspection log maintained on site in accordance with the requirements of Section 7(F) of this permit.

(1) All samples shall be comprised of only the wastewater described in each table. Samples shall be collected prior to combination with receiving waters or wastewater of any other type, and after all approved treatment units, if applicable. All samples collected shall be representative of the discharge during standard operating conditions.

(2) In cases where limits and sample type are specified but sampling is not required by this permit, the limits specified shall apply to all samples which may be collected and analyzed by the Department of Environmental Protection personnel, the Permittee, or other parties.

(3) The limits imposed on the discharges listed in this permit take effect on the issuance date of this permit, hence any sample taken after this date which, upon analysis, shows an exceedance of permit limits will be considered non-compliance.

The monitoring requirements begin on the date of issuance of this permit if the issuance date is on or before the 12th day of a month. For permits issued on or after the 13th day of a month, monitoring requirements begin the 1st day of the following month.

SECTION 6: SAMPLE COLLECTION, HANDLING AND ANALYTICAL TECHNIQUES

(A) Chemical Analysis

(1) Chemical analyses to determine compliance with effluent limits and conditions established in this permit shall be performed using the methods approved pursuant to 40 CFR 136 unless an alternative method has been approved in writing pursuant to 40 CFR 136.4 or as provided in section 22a-430-3(j)(7) of the RCSA. Chemicals which do not have methods of analysis defined in 40 CFR 136 shall be analyzed in accordance with methods specified in this permit.

(2) All metals analyses identified in this permit shall refer to analyses for Total Recoverable Metal as defined in 40 CFR 136 unless otherwise specified.

(3) The Minimum Levels specified below represent the concentrations at which quantification must be achieved and verified during the chemical analyses for the parameters identified in Section 5 Table(s) A, B, C, and E. Analyses for these parameters must include check standards within ten percent of the specified Minimum Level or calibration points equal to or less than the specified Minimum Level.

Parameter	Minimum Level
Aluminum	10.0 ug/L
Arsenic	5.0 ug/L
Cadmium	0.5 ug/L
Chlorine, total residual	20.0 ug/L
Copper	5.0 ug/L
Lead	5.0 ug/L
Nickel	5.0 ug/L
Polynuclear Aromatic Hydrocarbons (PAHs)	10.0 ug/L
Zinc	10.0 ug/L

(4) The value of each parameter for which monitoring is required under this permit shall be reported to the maximum level of accuracy and precision possible consistent with the requirements of this section of the permit.

(5) Effluent analyses for which quantification was verified during the analysis at or below the minimum levels specified in this section and which indicate that a parameter was not detected shall be reported as "less than x" where 'x' is the numerical value equivalent to the analytical method detection limit for that analysis.

(6) Results of effluent analyses which indicate that a parameter was not present at a concentration greater than or equal to the Minimum Level specified for that analysis shall be considered equivalent to zero (0.0) for purposes of determining compliance with effluent limitations or conditions specified in this permit.

(7) The analytical method used to determine the concentration of polynuclear aromatic hydrocarbons (PAHs) shall be EPA Method 625.

(B) Acute Aquatic Toxicity Test

(1) Samples for monitoring of Aquatic Toxicity shall be collected and handled as prescribed in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012).

(a) Grab samples shall be chilled immediately following collection. Samples shall be held at 4 degrees Centigrade until Aquatic Toxicity testing is initiated.

(b) Effluent samples shall not be dechlorinated, filtered, or modified in any way prior to testing for Aquatic Toxicity unless specifically approved in writing by the Commissioner for monitoring at this facility.

(c) Chemical analyses of the parameters identified in Section 5 Table(s) A, B, C, and E shall be conducted on an aliquot of the same sample tested for Aquatic Toxicity.

(i) At a minimum, pH, specific conductance, salinity, total alkalinity, total hardness, and total residual chlorine shall be measured in the effluent sample and, during Aquatic Toxicity tests, in the highest concentration of test solution and in the dilution (control) water at the beginning of the test and at test termination. If Total Residual Chlorine is not detected at test initiation, it does not need to be measured at test termination. Dissolved oxygen, pH, and temperature shall be measured in the control and all test concentrations at the beginning of the test, daily thereafter, and at test termination. Salinity shall be measured in each test concentration at the beginning of the test and at test termination.

(ii) For tests with saltwater organisms that require salinity adjustment of the effluent, chemical analyses shall be conducted on an aliquot of the effluent sample collected for Aquatic Toxicity testing and on an aliquot of the effluent following salinity adjustment. Both sets of results shall be reported on the Aquatic Toxicity Monitoring Report (ATMR).

(d) Tests for Aquatic Toxicity shall be initiated within 24 hours of sample collection.

(2) For freshwater discharges with a salinity of less than or equal to 2 parts per thousand, monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (invertebrate) above shall be conducted for 48-hours utilizing neonatal Daphnia pulex (less than 24-hours old).

(3) For freshwater discharges with a salinity of less than or equal to 2 parts per thousand, monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (vertebrate) above shall be conducted for 48-hours utilizing larval Pimephales promelas (1-14 days old with no more than 24-hours range in age).

(4) For saline discharges with a salinity of greater than 2 parts per thousand, monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (invertebrate) above shall be conducted for 48-hours utilizing juvenile Mysidopsis bahia (1-5 days old with no more than 24-hours range in age). See paragraph (6)(e) below.

(5) For saline discharges with a salinity of greater than 2 parts per thousand, monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (vertebrate) above shall be conducted for 48-hours utilizing larval Cyprinodon variegatus (1-14 days old with no more than 24-hours range in age). See paragraph (6)(e) below.

(6) Tests for Aquatic Toxicity shall be conducted as prescribed for static non-renewal acute tests in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012), except as specified below.

(a) For Aquatic Toxicity Limits expressed as an NOAEL value, Pass/Fail (single-concentration) tests shall be conducted at a specified Critical Test Concentration (CTC) equal to the Aquatic Toxicity Limit of 100% , as prescribed in section 22a-430-3(j)(7)(A)(i) of the Regulations of Connecticut State Agencies.

(b) Organisms shall not be fed during the tests, except Mysidopsis bahia which must be fed.

(c) Copper nitrate shall be used as the reference toxicant in tests with freshwater organisms.

(d) For freshwater testing, synthetic freshwater prepared with deionized water adjusted to a hardness of 50 mg/L (plus or minus 5 mg/L) as CaCO3 shall be used as dilution water in tests with freshwater organisms.

(e) Aquatic toxicity tests with saltwater organisms shall be conducted at the salinity of the effluent but not less than 5 parts per thousand. The salinity of the effluent shall be adjusted as necessary, in accordance with the following:

(i) Salinity adjustment that may be required in tests with saltwater organisms shall
utilize the minimum amount of synthetic salts to achieve the required salinity.

(ii) Synthetic seawater for use as dilution water or controls shall be prepared with deionized water and artificial sea salts as described in EPA/821-R-02-012. The salinity of the dilution water or controls shall be equal to the salinity of the effluent but not less than 5 parts per thousand.

(iii) If the salinity of the effluent is more than 5 parts per thousand higher or lower than the culture water used for rearing the organisms, a second set of controls matching the salinity of the culture water shall be added to the test series. Test validity shall be determined using the controls adjusted to match the effluent salinity.

(iv) Sodium lauryl sulfate or sodium dodecyl sulfate shall be used as the reference toxicant.

(7) Compliance with limits on Aquatic Toxicity shall be determined as follows:

(a) For limits expressed as an NOAEL value, compliance shall be demonstrated when the results of a valid pass/fail Aquatic Toxicity test indicates there is 90% or greater survival in the undiluted effluent.

SECTION 7: STORMWATER POLLUTION CONTROL PLAN

(A) The Permittee shall implement and maintain compliance with the Stormwater Pollution Control Plan ("Plan") prepared for the site as described in the Design Drawing Set entitled, "Tweed New Haven Airport Authority Runway Safety and Taxiway Improvements, Wetland Mitigation and Tide Gate Improvements" dated June 2005 and received January 10, 2006, and any amendments implemented in accordance with paragraphs (B) and (C) of this section. In addition, the Permittee shall comply with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control ("Guidelines"), as amended, and the provisions of this section.

(B) The Commissioner may notify the Permittee at any time that the Plan and/or the site do not meet one or more of the requirements of this permit. Within 7 days of such notice, or such other time as the Commissioner may allow, the Permittee shall make the required changes to the Plan and perform all actions required by such revised Plan. Within 15 days of such notice, or such other time as the Commissioner may allow, the Permittee shall submit to the Commissioner a written certification that the requested changes have been made and implemented and such other information as the Commissioner requires.

(C) The Permittee shall amend the Plan if the actions required by the Plan fail to prevent pollution or whenever there is a change in contractors or subcontractors at the site, or a change in design, construction, operation, or maintenance at the site which has the potential for the discharge of pollutants to the waters of the state and which has not otherwise been addressed in the Plan. Within 7 days of amending the Plan in accordance with this section, the Permittee shall submit to the Commissioner a description of the changes, an explanation of the need for the changes, and a schedule for implementation.

(D) In no event shall failure to complete, maintain or update a Plan relieve the Permittee of responsibility to implement any actions required to protect the waters of the state and to comply with all conditions of this permit.

(E) The Plan shall clearly identify each contractor and subcontractor that will perform actions on the site which may reasonably be expected to cause or have the potential to cause pollution of the waters of the State, and shall include a copy of the certification statement shown below signed by each such contractor and subcontractor. All certifications shall be included in the Plan.

Certification Statement

"I certify under penalty of law that I have read and understand the terms and conditions of this permit. I understand that as a contractor or subcontractor at the site, I am authorized by this permit, and must comply with the terms and conditions of this permit, including but not limited to the requirements of the Plan prepared for the site."

The certification shall include the name and title of the person providing the signature; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

(F) The Permittee shall inspect disturbed areas of the construction activity that have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site at least once every seven calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater. Where sites have been temporarily or finally stabilized, such inspection shall be conducted at least once every month for three months.

(1) Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the waters of the State. Erosion and sediment control measures shall be observed to ensure that they are operating correctly. Where discharge locations or points are assessable, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment tracking.

(2) Based on the results of the inspection, the description of potential sources and pollution prevention measures identified in the Plan shall be revised as appropriate as soon as practicable after such inspection. Such modifications shall provide for timely implementation of any changes to the site within 24 hours and implementation of any changes to the Plan within 3 calendar days following the inspection. The Plan shall be revised and the site controls updated in accordance with sound engineering practices, the Guidelines, and paragraphs (B) and (C) of this section.

(3) A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the Plan, and actions taken shall be made and retained as part of the Plan for at least three years after the date of inspection.

(G) The Permittee shall retain an updated copy of the Plan and all inspection reports required by this section at the construction site from the date construction is initiated at the site until the date construction at the site is completed

(H) Upon completion of construction, the Plan shall be kept as an appendix to the Stormwater Pollution Prevention Plan for the Tweed-New Haven Airport that has been prepared and maintained in accordance with Section 5(b) of the DEP General Permit for the Discharge of Stormwater Associated with Industrial Activity.

(I) Erosion and Sediment Controls

Erosion and sediment controls shall be installed and maintained in accordance with the Guidelines and the requirements of this permit. Use of controls to comply with this permit that are not included in the Guidelines must be approved by the Commissioner or the Commissioner's designated agent. The Plan and any amendments to the Plan, shall comply with the following:

(1) Stabilization Practices

Existing vegetation shall be preserved where attainable and disturbed portions of the site must be stabilized. Stabilization practices may include but not be limited to: silt fences, temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other vegetative and non-structural measures as may be identified by the guidelines. Where construction activities have permanently ceased or have temporarily been suspended for more than seven days, or when final grades are reached in any portion of the site,

stabilization practices shall be implemented within three days. Areas that will remain disturbed but inactive for at least thirty days shall receive temporary seeding in accordance with the Guidelines. Areas that will remain disturbed beyond the planting season, shall receive long-term, non-vegetative stabilization sufficient to protect the site through the winter. In all cases, stabilization measures shall be implemented as soon as possible in accordance with the Guidelines. Areas to be graded with slopes steeper than 3:1 (horizontal:vertical) and higher than 15 feet shall be graded with appropriate slope benches in accordance with the Guidelines.

(2) Structural Practices

Structural practices shall be used to divert flows away from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from the site. Such practices include but may not be limited to earth dikes (diversions), drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, outlet protection, reinforced soil retained systems, gabions, and temporary or permanent sediment basins and chambers. Unless otherwise specifically approved in writing, structural measures shall be installed on upland soils.

At a minimum, for discharge points that serve an area with between 2 and 5 disturbed acres at one time, a sediment basin, sediment trap, or other control as may be defined in the Guidelines for such drainage area, shall be designed in accordance with the Guidelines and installed. All sediment traps or basins shall provide a minimum of 134 cubic yards of water storage per acre drained and shall be maintained until final stabilization of the contributing area. This requirement shall not apply to flows from off-site areas and flows from the site that are either undisturbed or have undergone final stabilization where such flows are diverted around the sediment trap or basin. Any exceptions must be approved in writing by the commissioner.

For discharge points that serve an area with more than 5 disturbed acres at one time, a sediment basin shall be designed in accordance with the Guidelines and installed, which basin shall provide a minimum of 134 cubic yards of water storage per acre drained and which basin shall be maintained until final stabilization of the contributing area. This requirement shall not apply to flows from off-site areas and flows from the site that are either undisturbed or have undergone final stabilization where such flows are diverted around the sediment basin. Outlet structures from sedimentation basins shall not encroach upon a wetland. Any exceptions must be approved in writing by the commissioner.

(3) Maintenance

All erosion and sediment control measures, including vegetation and other protective measures shall be maintained in good and effective operating condition in accordance with the Guidelines and the conditions of this permit.

(4) Other controls

(a) Best management practices shall be performed at the site to ensure that no litter, debris, building materials, or similar materials are discharged to waters of the State.

(b) Off-site vehicle tracking of sediments and the generation of dust shall be minimized.

(c) All post-construction stormwater structures shall be cleaned of construction sediment and any remaining silt fence shall be removed at the completion of the project when the site has been stabilized.

SECTION 8: REPORTING REQUIREMENTS

(A) The results of chemical analyses and any aquatic toxicity test required above shall be entered on the Discharge Monitoring Report (DMR), provided by this office, and reported to the Bureau of Materials Management and Compliance Assurance (Attn: DMR Processing) at the following address. The report shall also include a detailed explanation of any violations of the limitations specified. The DMR shall be received at this address by the last day of the month following the month in which samples are collected.

Bureau of Materials Management and Compliance Assurance
Water Permitting and Enforcement Division (Attn: DMR Processing)
Connecticut Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

(B) Complete and accurate aquatic toxicity test data, including percent survival of test organisms in each replicate test chamber, LC50 values and 95% confidence intervals for definitive test protocols, and all supporting chemical/physical measurements performed in association with any aquatic toxicity test, including measured daily flow and hours of operation for the day of sample collection, shall be entered on the Aquatic Toxicity Monitoring Report form (ATMR) and sent to the Bureau of Water Protection and Land Reuse at the following address. The ATMR shall be received at this address by the last day of the month following the month in which samples are collected.

Bureau of Water Protection and Land Reuse (Attn: Aquatic Toxicity)
Connecticut Department of Environmental Protection
79 Elm St.
Hartford, CT 06106-5127

(C) If this permit requires monitoring of a discharge on a calendar basis (e.g. Monthly, quarterly, etc.), but a discharge has not occurred within the frequency of sampling specified in the permit, the Permittee must submit the DMR and ATMR, as scheduled, indicating "NO DISCHARGE". For those Permittees whose required monitoring is discharge dependent (e.g. per batch), the minimum reporting frequency is monthly. Therefore, if there is no discharge during a calendar month for a batch discharge, a DMR must be submitted indicating such by the end of the following month.

SECTION 9: RECORDING AND REPORTING OF VIOLATIONS, ADDITIONAL TESTING REQUIREMENTS

(A) If any sample analysis indicates that an Aquatic Toxicity effluent limitation in Section 5 of this permit has been exceeded, or that the test was invalid, another sample of the effluent shall be collected and tested for aquatic toxicity and associated chemical parameters, as described below in Section 10(B). In addition to the reporting requirements described in Section 10(B), the results shall be reported to the Bureau of Materials Management and Compliance Assurance (Attn: DMR Processing), at the address listed above, within 30 days of the exceedance or invalid test. Results of all tests, whether valid or invalid, shall be reported.

(B) The Permittee shall notify the Bureau of Materials Management and Compliance Assurance, Water Permitting and Enforcement Division, within 72 hours and in writing within thirty days of the discharge of any substance listed in the application but not listed in the permit if the concentration or quantity of that substance exceeds two times the level listed in the application.

SECTION 10: COMPLIANCE SCHEDULE

(A) On or before 30 days after the initiation of a discharge from the areas identified in Table A, Table B, Table C, and Table E, the Permittee shall collect and analyze a grab sample of the discharge from each area. For each of the discharge areas, the Permittee shall then submit a complete Attachment O (Part B discharge analysis of the permit application), including Table 5 Biological Testing Data, for the Commissioner's review and written approval. The Permittee must analyze for all substances listed in Table 1 and for those substances known or suspected present in Tables 2, 3 and 4 of the permit application.

(B) If the results of any valid pass/fail aquatic toxicity test indicate less than 90% survival in the undiluted effluent, or that the aquatic toxicity test was invalid for reasons other than control mortality, the sampled discharge shall be stopped. On or before 14 days after stopping a discharge for these reasons, the Permittee shall submit the results of the aquatic toxicity test and the associated chemical analyses, and a report for the review and written approval of the Commissioner explaining why the toxicity test was invalid or identifying the source of the toxicity with a proposal to treat the discharge to eliminate the toxicity. Upon the approval of the Commissioner and the installation/implementation of any necessary additional treatment, the Permittee may resume the discharge that was stopped. Within 7 days of reinitiating the discharge, a sample of the effluent shall be collected and tested for aquatic toxicity and the associated chemical parameters, as described in Section 5 and Section 6 of this permit, and the results reported to the Bureau of Water Protection and Land Reuse (Attn: Aquatic Toxicity).

Within 14 days of identifying an invalid Aquatic Toxicity Test because of control mortality, another sample of the effluent shall be collected and tested for Aquatic Toxicity and the associated chemical parameters, as described in Section 5 and Section 6 of this permit, and the results reported to the Bureau of Water Protection and Land Reuse (Attn: Aquatic Toxicity). Results of all tests, whether valid or invalid, shall be reported.

(C) If the results of any sample analysis show a total copper concentration of greater than 15 parts per billion (ug/l), the sampled discharged shall be stopped, and the Permittee shall submit for the review and written approval of the Commissioner a proposal to treat the discharge to reduce the copper concentration below the trigger limit. Such proposal shall be submitted within 14 days of the Permittee becoming aware of the results of the sample analysis.

(D) The Permittee shall use best efforts to submit to the Commissioner all documents required by this section of the permit in a complete and approvable form. If the Commissioner notifies the Permittee that any document or other action is deficient, and does not approve it with conditions or modifications, it is deemed disapproved, and the Permittee shall correct the deficiencies and resubmit it within the time specified by the Commissioner or, if no time is specified by the Commissioner, within thirty days of the Commissioner's notice of deficiencies. In approving any

document or other action under this Compliance Schedule, the Commissioner may approve the document or other action as submitted or performed or with such conditions or modifications as the Commissioner deems necessary to carry out the purposes of this section of the permit. Nothing in this paragraph shall excuse noncompliance or delay.

(E) Dates. The date of submission to the Commissioner of any document required by this section of the permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this section of the permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" as used in this section of the permit means calendar day. Any document or action which is required by this section only of the permit, to be submitted, or performed, by a date which falls on, Saturday, Sunday, or, a legal Connecticut or federal holiday, shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or legal Connecticut or federal holiday.

(F) Notification of noncompliance. In the event that the Permittee becomes aware that it did not or may not comply, or did not or may not comply on time, with any requirement of this section of the permit or of any document required hereunder, the Permittee shall immediately notify the Commissioner and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the Commissioner, the Permittee shall state in writing the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and the Permittee shall comply with any dates that may be approved in writing by the Commissioner. Notification by the Permittee shall not excuse noncompliance or delay, and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically so stated by the Commissioner in writing.

(G) Notice to Commissioner of changes. Within fifteen days of the date the Permittee becomes aware of a change in any information submitted to the Commissioner under this section of the permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the Permittee shall submit the correct or omitted information to the Commissioner.

(H) Submission of documents. Any document, other than a discharge monitoring report, required to be submitted to the Commissioner under this section of the permit shall, unless otherwise specified in writing by the Commissioner, be directed to:

Karen Allen, Sanitary Engineer 3
Department of Environmental Protection
Bureau of Materials Management and Compliance Assurance
Water Permitting and Enforcement Division
79 Elm Street
Hartford, CT 06106-5127

This permit is hereby issued on

_DRAFT_____
Gina McCarthy
Commissioner

GM/kla

DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: Tweed-New Haven Airport Authority
PAMS Company ID: 114931

PERMIT, ADDRESS, AND FACILITY DATA

PERMIT #: CT0030457 APPLICATION #: 200600317 FACILITY ID. 093-292

Mailing Address:						**Location Address:**					
Street:	Admin. Bldg., 155 Burr Street					**Street:**	155 Burr Street				
City:	New Haven	**ST:**	**CT**	**Zip:**	06512	**City:**	New Haven	**ST:**	**CT**	**Zip:**	06512
Contact Name:	Richard Lamport, Airport Manager					*DMR Contact*	Richard Lamport, Airport Manager				
Phone No.:	203-466-8833					**Phone No.:**	203-466-8833				

PERMIT INFORMATION

DURATION 5 YEAR X 10 YEAR ___ 30 YEAR ____

TYPE New X Reissuance ___ Modification ___

CATEGORIZATION POINT (X) NON-POINT ( ) GIS # ___

NPDES (X) PRETREAT () GROUND WATER(UIC) ( ) GROUND WATER (OTHER) ( )

NPDES MAJOR (MA) _____
NPDES SIGNIFICANT MINOR or PRETREAT SIU (SI) _____
NPDES or PRETREATMENT MINOR (MI) X

PRETREAT SIGNIFICANT INDUS USER (SIU) _____
PRETREAT CATEGORICAL (CIU) _____
Note: If it's a CIU then check off SIU

POLLUTION PREVENTION MANDATE ___ ENVIRONMENTAL EQUITY ISSUE ____

COMPLIANCE ISSUES

COMPLIANCE SCHEDULE YES X NO (If yes check off what it is in relation to.)

POLLUTION PREVENTION _____ TREATMENT REQUIREMENT_____WATER CONSERVATION

WATER QUALITY REQUIREMENT ___ REMEDIATION ___ OTHER- Completion of Attachment O of the permit application

IS THE PERMITTEE SUBJECT TO A PENDING ENFORCEMENT ACTION? NO__X__ YES __

OWNERSHIP CODE

Private _X_ Federal __ State __ Municipal (town only) __ Other public ____

DEP STAFF ENGINEER Karen Leonard Allen

PERMIT FEES

Discharge Description	DSN	Annual Fee
Dewatering of groundwater and soil stockpiles (fees equivalent to groundwater recovery system)	101/102 Table A	$4087.50
Dewatering of groundwater and soil stockpiles	103/104 Table B	NA
Dewatering of groundwater and soil stockpiles	105-109 Table C	NA
Dewatering of cofferdam during tide gate reconstruction	110 Table D	NA
Dewatering of soil stockpiles	111 Table E	NA
Stormwater associated with construction	112 Table F	$2662.50

FOR NPDES DISCHARGES

Drainage basin Code: 5000 Present/Future Water Quality Standard: A and SB/SA

NATURE OF BUSINESS GENERATING DISCHARGE

The facility is an active airport. The discharges to be generated are stormwater and dewatering wastewaters associated with construction activities. The following construction activities are proposed:

Runway 2 Safety Area
Construction of a 1,000-foot by 500-foot runway safety area
Relocation of Morris Creek

Runway 20 Safety Area

Construction of a 1,000-foot by 500-foot runway safety area
Rechannelization of Tuttle Brook/Morris Creek with a 584-foot long segment of the creek placed in a culvert under the runway safety area
Relocation of Dodge Avenue

Taxiway 'B' and Taxiway 'E'

Reconstruction and strengthening of existing taxiways 'B' and 'E'
Extension of Taxiway 'B'

PROCESS AND TREATMENT DESCRIPTION (by DSN)

DSN 101 and 102
Dewatering wastewaters from excavations and stockpiles during construction of the Runway 20 safety area at the north end of the site. The wastewaters will be directed into a settling basin for sediment removal then allowed to overflow to a grassed swale prior to discharging to Morris Creek. Drainage from the stockpiles is proposed to first pass through a layer of sand and into a filter-fabric wrapped perforated pipe before discharging to the settling basin.

DSN 103 and 104
Dewatering wastewaters from excavations and stockpiles during construction of the Taxiway B extension and improvements at the eastern end of the site. The wastewaters will be directed into a settling basin for sediment removal then allowed to overflow to a grassed swale prior to discharging to Morris Creek. Drainage from the stockpiles is proposed to first pass through a layer of sand and into a filter-fabric wrapped perforated pipe before discharging to the settling basin.

DSN 105-109
Dewatering wastewaters from excavations and stockpiles during construction of the Runway 2 safety area at the south end of the site. The wastewaters will be directed into a settling basin for sediment removal then allowed to overflow to a grassed swale prior to discharging to Morris Creek. Drainage from the stockpiles is proposed to first pass through a layer of sand and into a filter-fabric wrapped perforated pipe before discharging to the settling basin.

DSN 110
Dewatering wastewater from the coffer dam installed during the tide gate reconstruction. The water will be directed into a settling basin for sediment removal then allowed to overflow to a swale lined with erosion control matting and equipped with stone check dams.

DSN 111
Dewatering wastewaters from soil stockpiles at the secondary soil dewatering site at the south end of the site. Drainage from the stockpiles is proposed to first pass through a layer of sand and into a filter-fabric wrapped perforated pipe before discharging to the settling basin. The water would then overflow into a grassed swale prior to discharging to Morris Creek.

DSN 112
Stormwater runoff from construction areas. The runoff will be managed with erosion and sediment controls designed, installed and maintained in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, the conditions contained in Section 7 of this permit, and the Design Drawing Set entitled, "Tweed New Haven Airport Authority Runway Safety and Taxiway Improvements, Wetland Mitigation and Tide Gate Improvements" dated June 2005 and received January 10, 2006.

The application also included a proposal by the permittee to utilize mobile settling tanks ('frac' tanks) as an alternative to the settling basins, if conditions in the field warrant additional treatment to remove suspended solids from the discharges. **RESOURCES USED TO DRAFT PERMIT**

__ Federal Effluent Limitation Guideline 40 CFR _____
name of category

__ Performance Standards

__ Federal Development Document
name of category

__ Treatability Manual

X Department File Information

X Connecticut Water Quality Standards

X Anti-degradation Policy

X Coastal Management Consistency Review Form

X Other – DEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities

BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS

X Best Professional Judgment (See Comments)

X Case-by-Case Determination (See Comments)

X Section 22a-430-4(s) of the Regulations of Connecticut State Agencies (See Comments)

GENERAL COMMENTS

Tables A, B, C and E contain limits on total oil and grease and total suspended solids consistent with Best Professional Judgment and a Case-by-Case Determination, and section 22a-430-4(s) of the Regulations of Connecticut State Agencies. Tables A, B, C, and E also contain a limiting range for pH consistent with a Case-by-Case Determination and Best Professional Judgement.

The need for inclusion of water quality based discharge limitations for the dewatering wastewaters was evaluated consistent with Connecticut Water Quality Standards and criteria, pursuant to 40 CFR 122.44(d). Although the results of the soils investigation do not indicate any site contamination, relevant groundwater data were not available for evaluation of consistency with the available aquatic life criteria (acute and chronic) and human health (fish consumption only) criteria. A compliance schedule was included in the permit requiring the Permittee to collect and analyze samples of the dewatering discharges upon initiation and to submit Attachment O, Part B of the permit application to provide the data necessary for such an evaluation. The compliance schedule contains both a copper concentration trigger and an aquatic toxicity limit which requires the Permittee to cease discharging and to submit a proposal for the Commissioner's review and approval to further treat the wastewater prior to discharge to Morris Creek. The copper concentration trigger was included because of the proximity of the site to tidal areas and the toxicity of copper to saltwater organisms at low concentrations.