



Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Alan W. Klimek, P.E., Director
Division of Water Quality
Coleen H. Sullins, Deputy Director
Division of Water Quality

November 10, 2003

Mr. Mickie Elmore
Director of Development
Piedmont Triad Airport Authority
P.O. Box 35445
Greensboro, NC, 27425

Re: Proposed Runway 5L/23R, Proposed New Overnight Express Air Cargo Sorting
and Distribution Facility, and Associated Developments at Piedmont Triad
International Airport, Guilford County
DWQ #00-0846; USACE Action ID. No. 200021655

Dear Mr. Elmore:

Attached hereto is a copy of Certification No. 3428 issued to the Piedmont Triad Airport Authority, dated November 10, 2003. In addition, you should get any other federal, state or local permits before you go ahead with your project including (but not limited to) Solid Waste, Sediment and Erosion Control, Stormwater, Dam Safety, Non-discharge and Water Supply Watershed regulations. This Certification replaces the one issued to you September 2, 2003.

If we can be of further assistance, do not hesitate to contact us.

Sincerely,

Alan W. Klimek, P.E.

AWK/cbk

Attachments

cc: John Thomas; U.S. Army Corps of Engineers, Raleigh Regulatory Field Office
DWQ, Winston-Salem Regional Office
File Copy
Central Files
Steve Zoufaly
Interested Citizens
Sylvia Norman; City of Greensboro Attorney's Office
Dasha Brown; Contract Administrator; Guilford County Attorney's Office
Kathy Matthews; US Environmental Protection Agency – Region IV



NORTH CAROLINA 401 WATER QUALITY CERTIFICATION

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (DWQ) Regulations in 15 NCAC 2H, Section .0500 to the Piedmont Triad Airport Authority (PTAA) for the discharge of fill into the jurisdictional waters of Brush Creek and its unnamed tributaries, including approximately 23.44 acres of wetlands and 12,846 linear feet of streams associated with the Proposed Runway 5L/23R, Proposed New Overnight Express Air Cargo Sorting and Distribution Facility, and Associated Developments at Piedmont Triad International Airport, Guilford County, North Carolina, pursuant to an application filed on 5th day of February of 2002.

The application and supporting documentation provides adequate assurance that the proposed work will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application, the supporting documentation, and conditions hereinafter set forth.

This approval is only valid for the purpose and design submitted in the application materials and as described in the Public Notice. If the project is changed, prior to notification a new application for a new Certification is required. If the property is sold, the new owner must be given a copy of the Certification and approval letter and is thereby responsible for complying with all conditions of this Certification. Any new owner must notify the Division and request the Certification be issued in their name. Should wetland or stream fill be requested in the future, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to be valid, compliance with the conditions listed below is required.

Conditions of Certification:

Sediment and Erosion Control:

1. Sediment and erosion control measures shall adhere to the design standards for sensitive watersheds [15A NCAC 4B .0024]; see NCDOT publication, Best Management Practices for the Protection of Surface Waters (March 1997);
2. The turbidity standard shall not be exceeded as described in 15 A NCAC 2B .0200. Appropriate sediment and erosion control practices must be used to meet this standard;
3. All sediment and erosion control measures placed in wetlands and waters shall be removed and the original grade restored within two months after the Division of Land Resources has released the project;
4. Appropriate sediment and erosion control practices which equal or exceed those outlined in the most recent version of the "North Carolina Sediment and Erosion Control Planning and Design Manual" or the "North Carolina Surface Mining Manual" whichever is more appropriate (available from the Division of Land Resources (DLR) in the DENR Regional or Central Offices) shall be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to assure compliance with the appropriate turbidity water quality standard;

Culverts:

5. Culverts required for this project shall be installed in such a manner that original stream profiles are not altered. Existing stream dimensions (including the cross section dimension, pattern, and longitudinal profile) are to be maintained above and below the locations of each culvert. Culverts shall be designed and installed to allow for aquatic life movement as well as to prevent head cutting of the streams. If any of the existing pipes are or become perched, the appropriate stream

grade shall be re-established. If the pipes are installed in a perched manner, the pipes shall be removed and re-installed correctly.

The culvert(s) shall not be installed in such a manner that will cause aggradation or erosion of the stream up-or down-stream of the culvert(s). Existing stream dimensions (including the cross section dimension, pattern and longitudinal profile) are to be maintained above and below locations of each culvert.

Native, woody vegetation and other soft stream bank stabilization techniques must be used where practicable instead of rip-rap or other bank hardening methods. If rip-rap is necessary, it shall not be placed in the stream bed, unless specifically approved by the Division of Water Quality.

Installation of culverts in wetlands must ensure continuity of water movement and be designed to adequately accommodate high water or flood conditions;

Wetland and Stream Mitigation:

6. Mitigation must be provided for the proposed impacts as specified in the tables below and as described in the *Wetland and Stream Mitigation Plan* prepared by LawGibb Group/MACTEC (December 28, 2001) and the *Conceptual Mitigation Report* prepared by EcoScience (February 2002). The *Conceptual Mitigation Report* notes that up to 6,840 linear feet of stream restoration will be achieved onsite. For the purposes of this Certification, 6,539 linear feet of restoration at Causey Farms will be required to satisfy the requirements of 15A NCAC .0506(h)(6). The remaining 301 linear feet of restoration credits will be available for use by the PTAA for stream mitigation should design constraints necessitate minor increases in stream fill. A final stream and wetland mitigation plan must be approved in writing by the Division of Water Quality before any permanent facilities associated with this project are occupied. Additionally, the compensatory mitigation plan must be completely constructed and implemented according to the plans approved by the Division before any permanent facilities associated with the project are occupied. The mitigation sites must be maintained according to the approved plan and permanently protected by the use of conservation easements or similar protections. If the Division determines that any of the mitigation projects are not constructed or performing according to the approved plans, the Division shall notify you in writing and corrective action shall be completed within 6 months according to the approved plans. Any repairs or adjustments to the mitigation sites must be made according to the approved plan or must receive prior written approval from the Division. Two copies of an as-built report as well as annual reports shall be sent to the Division by April 1st of each year for the entire length of the five year monitoring period;

| WETLANDS | Preservation | Creation | Restoration | Total |
|----------------|--------------|------------|-------------|-------------|
| Horsepen Creek | | 12.6 acres | 2.0 acres | 14.6 acres |
| Brush Creek | 69.9 acres | 5.3 acres | 7.4 acres | 82.6 acres |
| Causey Farms | | | 4.0 acres | 4.0 acres |
| Subtotal: | 69.9 acres | 17.9 acres | 13.4 acres | 101.2 acres |

| STREAMS | Preservation | Restoration | Total |
|----------------|--------------------|--------------------|--------------------|
| Horsepen Creek | | 6,107 linear feet | 6,107 linear feet |
| Brush Creek | 14,510 linear feet | 200 linear feet | 14,710 linear feet |
| Causey Farms | | 6,539 linear feet | 5,910 linear feet |
| Subtotal: | 14,510 linear feet | 12,846 linear feet | 26,727 linear feet |

Water Supply Watershed Variance:

7. All conditions of the Major Variance to the water supply watershed protection stream buffer requirements approved by the Water Quality Committee of the Environmental Management Commission on October 9, 2002 are hereby incorporated as conditions of this 401 Certification;

Stormwater Management:

8. The final, written stormwater management plan for each of the four phases of this project (including a signed and notarized Operation and Maintenance Agreement) shall be approved in writing by the Division of Water Quality before the impacts associated with the corresponding phase of the project occur. The stormwater management plan must include plans and specifications for stormwater management facilities that are appropriate for surface waters classified as WS-III, appropriate for use in proximity to runways and designed to remove 85% Total Suspended Solids on an annual average basis according to the NC Department of Environment and Natural Resources Stormwater Best Management Practices Manual (April, 1999). These facilities must be designed to treat the runoff from the entire project, unless otherwise explicitly approved by the Division of Water Quality. Also, before any of the new facilities are used at the Piedmont Triad International Airport, the facilities (as approved by the Division) shall be constructed and operational, and the stormwater management plan (as approved by the Division) shall be implemented. The structural stormwater practices as approved by the Division as well as drainage patterns must be maintained in perpetuity. No changes to the structural stormwater practices shall be made without written authorization from the Division. The four phases include:
 - 8a. Fedex Site,
 - 8b. Bryan Boulevard Relocation,
 - 8c. Runway 5L/23R, and
 - 8d. Crossfield taxiway.
- 8e. Within one year of your receipt of this Certification, the retro-fit stormwater control plan as necessary to meet Water Quality Standards for the entire Piedmont Triad International Airport and areas associated with the Horsepen Creek mitigation area shall be submitted to the Division for written approval. Before any facilities associated with any of the four phases of this project are occupied, written approval for the retro-fit stormwater plan must be obtained from the Division;
9. The combined performance of the stormwater control measures must be modeled for 1, 2, 5, and 10 year pre-and post-construction discharge events to ensure that downstream peak flows and the resultant streambank stability (downstream to Lake Higgins for Brush Creek and downstream to Lake Brandt for Horsepen Creek) are not amplified by the simultaneous, combined releases from the stormwater control measures from the entire PTAA property. The release rates for stormwater management facilities must be designed based on the modeling to prevent amplification of peak flows. The above designs must be approved in writing by this The Division before any of the facilities which are tributary to each of the stormwater control devices is occupied or opened for use. In addition, the stormwater management facilities, as approved by the Division, must be constructed and operational, prior to the occupation or use of the facilities authorized herein;
10. An additional stormwater management plan (including a spill containment and treatment failure plan) must be provided to ensure that Surface Water Quality Standards are not violated as the result of runoff contamination by deicing and/or similar agents that are applied to aircraft or paved surfaces. The plan must include means to collect the runoff that occurs during or following the application of the above agents and must include a means to treat the pollutants in runoff to levels that comply with Surface Water Quality Standards. The plan must include the procedures, design plans and specifications necessary to achieve compliance with Water Quality Standards. The plan must be approved by the Division of Water Quality within one year of the date of issuance of the 404 Permit. Additionally, before the impacts associated with the first phase of the project to be constructed will occur, procedures and infrastructure must be in place and operational. The plan must be implemented as approved by the Division of Water Quality;

11. Additionally, any increase in duration of discharges in excess of the pre-construction channel forming discharge must be evaluated to determine the effects on downstream stream bed and bank stability (downstream to Lake Higgins for Brush Creek and downstream to Lake Brandt for Horsepen Creek) from the entire PTAA property. In order to make this determination, the duration of the 1, 2, 5 and 10 year pre-construction discharges that are in excess of the peak pre-construction 1 year discharge must be compared to the duration of the 1, 2, 5 and 10 year post-construction discharges that are in excess of the peak pre-construction 1 year discharge. The release rates from the stormwater management facilities must be designed based on the above evaluation to prevent additional stream bed or bank erosion. The above designs must be approved in writing by the Division before any of the facilities tributary to each of the stormwater control devices is occupied or opened for use, and the facilities (as approved by the Division), must be constructed and operational;

Continuing Compliance:

12. The Piedmont Triad Airport Authority shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with section 303(d) of the Clean Water Act) and any other appropriate requirements of State law and federal law. If the Division determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, the Division may reevaluate and modify this Certification to include conditions appropriate to assure compliance with such standards and requirements in accordance with 15A NCAC 2H.0507(d). Before modifying the Certification, the Division shall notify PTAA and the US Army Corps of Engineers, provide public notice in accordance with 15A NCAC 2H.0503 and provide opportunity for public hearing in accordance with 15A NCAC 2H.0504. Any new or revised conditions shall be provided to PTAA in writing, shall be provided to the United States Army Corps of Engineers for reference in any Permit issued pursuant to Section 404 of the Clean Water Act, and shall also become conditions of the 404 Permit for the project;

Other conditions:

13. Measures shall be taken to prevent live or fresh concrete from coming into contact with waters of the state until the concrete has hardened;
14. Waste or borrow sites shall not be located in streams or wetlands;
15. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids and other toxic materials;
16. All work in stream channels shall be performed during low flow conditions;
17. The outside edge of the buffer, wetland or water boundary, along the entire construction corridor within the boundaries approved under this Certification shall be clearly marked by orange fabric fencing for areas that have been approved to infringe within the buffer, wetland or water prior to any land disturbing activities;
18. All temporary fill and culverts shall be removed and the impacted area returned to the original grade, including each stream's original cross sectional dimensions, plan form pattern, and longitudinal bed and bed profile after construction is complete or within six (6) months of the establishment of the crossing, whichever is sooner, and the various sites shall be stabilized with natural woody vegetation (except for the maintenance areas of permanent utility crossings) and restored to prevent erosion. If the crossings are not completely removed and restored as described above within the specified time above, additional written approval from the Division must be obtained to modify this condition;

19. In the event that PTAA undertakes to transfer property ownership of any land containing retained jurisdictional wetlands, waters and protective buffers, deed notifications or similar mechanisms shall be placed on all said jurisdictional areas on the property in order to assure compliance for future wetland, water and buffer impact. These mechanisms shall be put in place prior to said property transfer. A sample deed notification can be downloaded from the 401/Wetlands Unit web site at h2o.enr.state.nc.us/ncwetlands;
20. The anticipated cumulative impacts from this project shall be addressed via written agreements between the NC Division of Water Quality, Greensboro and Guilford County in accordance with the appropriate signed agreements;
21. Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties;
22. Upon completion of the project, the Applicant shall complete and return the enclosed "Certificate of Completion" form to notify the Division when all work included in the §401 Certification has been completed. The responsible party shall complete the attached form and return it to the 401/Wetlands Unit of the NC Division of Water Quality upon completion of the project.
Photographs upstream and downstream of each culvert site must be included to document correct installation along with the Certificate of Completion form;
23. This Certification shall expire upon expiration of the 404 Permit.

If this Certification is unacceptable to you, you have the right to an adjudicatory hearing upon written request within sixty (60) days following receipt of this Certification. This request must be in the form of a written petition conforming to Chapter 150B of the North Carolina General Statutes and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. If modifications are made to an original Certification, you have the right to an adjudicatory hearing on the modifications upon written request within sixty (60) days following receipt of the Certification. Unless such demands are made, this Certification shall be final and binding.

This the 10th day of November 2003
DIVISION OF WATER QUALITY



Alan W. Klimek, P.E.

WQC # 3428

AWK/cbk