APPENDIX G

Water Quality Certification

File No. 2002-00017

Laurel Marina and Yacht Club, Inc.

South Fork Holston River Mile 56.5, Sullivan County, TN

DEPARTMENT OF ENVIRONMENT & CONSERVATION
Division of Water Pollution Control
401 Church Street
7th Floor, L & C Building
Nashville, TN 37243-1534

May 23, 2006

Dale T. Thomas
Laurel Marina and Yacht Club, Inc.
191 Shady Ford Road
Bristol, Tennessee 37620

SUBJECT: §401 Water Quality Certification
Tennessee Aquatic Resource Alteration Permit
State of Tennessee Application # NRS05-080

Dear Mr. Thomas:

Pursuant to §401 of the Federal Clean Water Act (33 U.S.C. §1341), the State of Tennessee is required to certify whether the activity described below will violate applicable water quality standards. Accordingly, the Division of Water Pollution Control requires reasonable assurance that the activity will not violate provisions of *The Tennessee Water Quality Control Act of 1977* (T.C.A. § 69-3-101 et seq.) or of §§ 301, 302, 303, 306 or 307 of *The Clean Water Act.*

Subject to conformance with approved plans, specifications, and other information submitted in support of the referenced application, the State of Tennessee hereby certifies the proposed activity pursuant to 33 U.S.C. 1341. This shall serve as authorization pursuant to T.C.A. § 69-3-101 et seq.

LOCATION: Mile 56.5, South Holston River, in Sullivan County, TN, South Holston Lake, Coordinates: 36.5583°N, 82.0496°W (USGS Holston Valley (TN,VA) Topo Map Quad)

DESCRIPTION: The authorized work includes discharge of fill material below normal summer pool elevation of 1729.0 for construction of a parking area. Approximately 58,284 cubic yards of fill would be placed in an embayment to construct the parking area. An additional 20,886 cubic yards of fill would be placed above normal summer pool. The fill material would be excavated from 3 different areas of shoreline located near the embayment to be filled.

EFFECTIVE DATE: May 23, 2006

EXPIRATION DATE: May 22, 2011

PROJECT CONDITIONS:

1 The work shall be accomplished in conformance with the accepted plans, specifications, data and other information submitted in support of the above application and the limitations, requirements, and conditions set forth herein.

2. Design and final construction of the parking lot shall incorporate water quality improvement principles. The permittee shall present for the division's review and written approval a detailed plan that contains features consistent with TVA's Design Principles for Parking Lots. http://www.tvaed.com/sustainable/parking.htm

3. All work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in Rule 1200-4-3.-03 of the Rules of The Tennessee Department of Environment and Conservation. This includes but is not limited to the prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of waters of the State for any of the uses designated by Rule 1200-4-4. These uses include fish and aquatic life, livestock watering and wildlife, recreation, irrigation, industrial water supply, and domestic water supply.

4. Temporary erosion and sedimentation control measures must be used throughout the construction period. Effective erosion control must be installed along the base of all fills and cuts, on the down hill side of stock piled soil, and along stream banks in cleared or graded areas to prevent sedimentation into streams. Controls shall be repaired and maintained as necessary. Measures shall include, but not be limited to the use of entrenched fabric filter fence, entrenched staked straw bales, sediment basins, berms, dams, brush barriers, fiber mats, netting, gravel, mulches, grasses, slope drains, etc.

5. Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the state. All spills must be reported immediately to the appropriate emergency management agency. Measures shall be taken immediately to prevent the pollution of waters of the State, including groundwater.

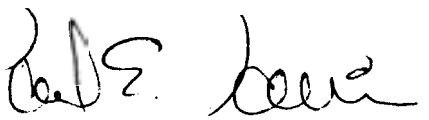
This does not obviate requirements of other federal, state or local laws. In particular, work shall not commence until the applicant has received the federal §404 permit from the U. S. Army, Corps of Engineers or §26a permit from the Tennessee Valley Authority where necessary.

The State of Tennessee reserves the right to modify or revoke this permit or to seek modification or revocation should the State determine that the activity results in more than an insignificant violation of applicable water quality criteria or violation of the Act. Failure to comply with permit terms may result in penalty in accordance with § 69-3-115 of the Act.

An appeal of this action may be made to the Water Quality Control Board. In order to appeal, a petition requesting a hearing before the Board must be filed within 30 days after receipt of the permit action. In such petition, each contention should be stated in

numbered paragraphs that describe how the proposed activity would be lawful and the action of the state is inappropriate. The petition must be prepared on 8½" by 11" paper, addressed to the Water Quality Control Board and filed in duplicate at the following address: Paul E. Davis, Director, Division of Water Pollution Control, 6th Floor L & C Annex, 401 Church Street, Nashville, Tennessee 37243-1534. Any hearing would be in accordance with T.C.A. §69-3-110 and 4-5-301 et seq. Questions concerning this certification should be addressed to Mr. Robert Baker at 615-532-0710.

Sincerely,



JUN 20

Paul E. Davis
Director

cc: Tom Welborn, U.S. Environmental Protection Agency, Atlanta, GA.
Lee Barclay, U.S. Fish & Wildlife Service, Cookeville, TN
Rob Todd, Tenn. Wildlife Resources Agency, Nashville, TN
Carl Olson, Nashville District Corps of Engineers, Nashville, TN
Andrew Tolley, Water Pollution Control Division, Johnson City Environmental Field Office

DEPARTMENT OF ENVIRONMENT & CONSERVATION

NOTICE OF DETERMINATION

Laurel Marina and Yacht Club, Inc., Proposed Commercial Marina Expansion, Excavation and Fill at South Fork Holston River Mile 56.5, Right Bank, South Holston Lake, Sullivan County, Tennessee

This notice sets out the final determination of the Tennessee Department of Environment and Conservation, Division of Water Pollution Control, on the §401 water quality certification requested by the Laurel Marina and Yacht Club, Inc., pursuant to *The Federal Water Pollution Control Act of 1972* and *The Tennessee Water Quality Control Act of 1977.*

The Laurel Marina and Yacht Club presently operates a commercial harbor and marina on the South Holston Reservoir. On March 16, 2005, a public notice was issued that announced the proposal to expand the existing commercial harbor limits and marina facilities. The expansion would include an additional 181 boat slips and 30 house boat slips. Also, Laurel Marina proposes to fill an embayment to construct additional parking facility. Approximately 58,284 cubic yards of fill needed to fill the embayment would be below the normal summer pool. An additional 20,886 cubic yards of fill would be above normal summer pool. The fill material would be excavated from 3 different areas of shoreline located near the embayment to be filled.

A public hearing was requested in response to that notice. The department held a hearing in Bristol on the evening of September 20, 2005. The comments following in the text below were received during the public comment period from written responses to the public notice and both oral and written comments at the public hearing. Only comments that regarded substantive water quality issues were mentioned and addressed.

Tennessee Valley Authority (TVA) has specific authority and mandate under the *Tennessee Valley Authority Act of 1933* to operate and manage lakes within the Tennessee River Valley for integrated uses, including flood control, navigation, land use, recreation, power generation, and water quality. To establish a valley-wide policy for the management of shoreline and aquatic resources, TVA developed a Shoreline Management Policy with interagency and public participation. The shoreline management policy can be found in the final environmental impact statement: http://www.tva.com/river/landandshore/landuse_shore.htm#feis.

Management and operational planning for lakes within the Tennessee River Valley is addressed in TVA's Reservoir Operations Study – Final Programmatic Environmental Impact Statement (FEIS). The Environmental Impact Statement may be viewed at: http://www.tva.gov/environment/reports/ros_eis/.

The public's concerns and questions, together with the division's responses, are presented below. These issues were gathered through the public participation process, including the public hearing and from written and oral comment received since the comment period began.

Comment 1:

> *The project would result in an increase in boats, houseboats and other craft that contain onboard marine sanitation devices. This would result in an unacceptable increase in sewage that would be discharged from those craft directly into the lake.*

Answer 1:

Such discharges are allowed in South Holston Lake under the federal *Clean Water Act* (*CWA*) and its implementing regulations. However, discharges must be treated by a United States Coast Guard approved Type I or Type II marine sanitation device before release. At present, we have no data or information that would indicate an unacceptable increase in bacteriological contamination under these circumstances that would cause the division to deny the permit based upon this concern.

Comment 2:

> *The discharge of sewage from on board marine sanitation devices is a problem at present. The increase in the numbers of boats will only worsen that problem. To resolve this issue, South Holston Lake should be designated a no discharge lake.*

Answer 2:

Federal regulations allow the discharge of sewage from a Coast Guard-certified marine sanitation device in fresh-water lakes and impoundments accessible through locks and other navigable interstate waters. South Holston Lake lies in both Virginia and Tennessee and therefore, as interstate waters, such discharges are allowed.

However, the federal regulations (40 CFR, §140.4) do establish a mechanism by which waters may be designated as no discharge waters. Under those regulations, a state may completely prohibit the discharge from all vessels of any sewage, whether treated or not, into some or all of the waters within such State by making a written application to the Environmental Protection Agency.

To initiate the no discharge zone process, an interested party, group, or local government can discuss their concerns with the appropriate state agency that addresses vessel sewage discharges. If the state determines a waterbody to be appropriate for designation as a no discharge zone, the state can submit to the EPA Regional Administrator an application to have the waterbody (or waterbodies) of concern designated. More information can be found at the following website:
http://www.epa.gov/owow/oceans/regulatory/vessel_sewage/vsdarticle.html

Comment 3:

Erosion and sedimentation during excavation and construction will cause environmental harm to the waters of South Holston Lake.

Answer 3:

Construction projects that disturb the ground will, without preventative measure, result in erosion of the disturbed area and sedimentation to adjacent waters. However, prior to construction, the project must develop a site-specific Storm Water Pollution Prevention Plan that must be submitted to the division for permitting under the General NPDES Permit For Discharges of Storm Water Associated With Construction Activities. The presumption is that this source of pollution can be adequately controlled or prevented during construction through implementation of such a plan.

Comment 4:

The project would fill about 0.943 acres at summer pool for the parking lot. The applicant should compensate for the loss of public waters.

Answer 4:

The project would displace about 1 acre of the embayment during summer pool. However, during winter pool the proposed excavation would create offsetting surface area and tend to balance the total surface acreage of water. The applicant proposes no compensation for the filling of the embayment and loss of surface waters during summer pool. The applicant does propose, however, to develop fish attraction structures to compensate for the loss of shallow water fish habitat.

We believe that the responsibility for the disposition of real property and public use involving the filling of lakebed in this case lies with TVA under its management authority.

Comment 5:

During a rainfall, the run off from the parking lot will contain pollutants that will pollute the adjacent lake waters. The parking lot run off should be captured and treated prior to its discharge into the lake.

Answer 5:

At present, Tennessee's storm water regulations do not require special provisions for treatment for parking lot runoff. This parking lot is not expected to contain unusual or elevated levels of contaminants or pollutants. However, one of the conditions of the permit is that the permittee must provide treatment for parking lot storm-water runoff using design features such as dry swales, vegetative channels, bio-retention areas, filter strips, and other practices that can be integrated into the site development. The division must approve the plan prior to construction.

Comment 6:

Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. When added to other past, present, and reasonably foreseeable future actions, this marina expansion project will result in a cumulative impact on the environment.

Answer 6:

Cumulative impact is a consideration of the §401 Water Quality Certification; however, we believe that cumulative impact resulting from shoreline development and intensity of public use is properly addressed through the governing action of TVA through its management policies.

Comment 7:

The marina expansion project will result in increased numbers and activity of boats and vessels. This increase will then lead to an increase in shoreline wave erosion.

Answer 7:

Boat wakes can increase shoreline erosion. The extent of shoreline erosion caused by boats includes many other factors in addition to the numbers of boats. Shoreline erosion resulting from boats and other recreational vessels is addressed in TVA's Reservoir Operations Study. We consider that boat traffic is outside our scope of review.

Comment 8:

The marina expansion project will result in increased numbers and activity of boats and vessels. This increase will then lead to an increase in petroleum pollution from boats; South Holston Lake should be designated for sailboats only.

Answer 8:

The division has broad authority to set pollution standards and regulate the discharge of pollutants into the lake. However, to help protect water quality in relation to boating activities, the division must rely on non-regulatory mechanisms such as the Tennessee Valley Clean Marina Initiative, which addresses activities such as sewage management, oil and gas control, marina siting, and erosion prevention. Other mechanisms include boating regulations promulgated by the Tennessee Wildlife Resources Agency.

Comment 9:

Comments were received regarding the chemistry and stability of cut and fill; particularly the concern for iron (and other metals) in the dredged fill material.

Answer 9:

Geotechnical investigation by the applicant has shown that the dredged material to be used to fill the embayment for the parking lot will be of satisfactory composition for structural use. Because it will be effectively capped with pavement for parking, we do not expect the fill to become re-saturated after the initial dewatering. The potential for iron or other metals or minerals to leach from that fill would be significantly diminished.

Other Comments: Several comments were received that are not substantive to water quality and therefore beyond the authority of the division. These comments regarded such matters as over crowding on the lake, misuse of personal watercraft, economic development, adequate slippage for boats, etc. We consider these issues to be outside our scope of review.

The Division's determination is that a §401 certification can be issued in accordance with the Act and rules.

prepared by: Robert Baker — May 23, 2006

Robert Baker
Assistant Manager, Natural Resources Section
Date

issued by: Paul E Davis — May 23, 2006

Paul E. Davis, P. E.
Director, Division of Water Pollution Control
Date