APPENDIX D

ADEM Best Management Practices

FILE NO. 2008-01138

Proposed Recessed Excavation and Private Boat Docks

Sailboat Hollow Development

In an Embayment of Tennessee River Mile 271.3, Right Bank,
Wilson Lake, Lauderdale County, Alabama

ADEM

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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May 30, 2007

COL. PETER F. TAYLOR, JR.
DISTRICT ENGINEER
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US ARMY CORPS OF ENGINEERS
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RE: Clean Water Act (CWA) Section 401 Water Quality Certification (WQC)
March 7, 2007, Federal Register, Vol. 72, No. 47, Pages 11092 – 11198
US Army Corps of Engineers (COE) Nationwide Permits (NWPs) And General Conditions For Alabama

Dear Sirs:

This office has completed a review of the above-referenced joint public notice listed, and all associated materials submitted related to the proposed COE NWPs for Alabama. Comments made during the public notice period have also been forwarded to us for review. Please be advised that ADEM is providing to the COE additional conditions regarding Coastal Consistency Review by separate correspondence.

Because action pertinent to WQC is required by Section 401(a)(1) of the CWA, 33 U.S.C. Section 1251, et seq., we hereby issue certification, for a period **not to exceed five (5) years** from the date of issuance, that there is reasonable assurance that the discharge resulting from the proposed activities as submitted will not violate applicable water quality standards established under Section 303 of the CWA and Title 22, Section 22-22-9(g), Code of Alabama, 1975, provided the applicant acts in accordance with the following conditions as specified. We further certify that there are no applicable effluent limitations under Section 301 and 302 nor applicable standards under Section 306 and 307 of the CWA in regard to the activities specified.

To minimize adverse impacts to State waters, by copy of this letter we are requesting the COE to incorporate the following as special conditions appropriate to each activity in Alabama authorized by the COE NWPs:

1. The applicant shall obtain ADEM concurrence relative to consistency with the State's Coastal Zone Management Program (CZMP) for projects located wholly or partially within the defined coastal area of Alabama, as defined by ADEM Admin. Code R. 335-8-1-.02 (k), prior to commencing activities authorized by the COE NWPs. In addition, during project implementation, the applicant shall ensure compliance with applicable requirements of ADEM Admin. Code Div. 335-8 and any CZMP conditions to the COE NWPs.

2. During project implementation, the applicant/owner/operator shall ensure compliance with applicable requirements of ADEM. Admin. Code Chapter 335-6-6 (National Pollutant Discharge Elimination System), Chapter 335-6-10 (Water Quality Criteria), and Chapter 335-6-11 (Water Use Classifications for Interstate and Intrastate Waters).

3. Pursuant to EPA rules and ADEM Admin. Code Ch. 335-6-12, the operator/owner or applicant is required to register for and maintain valid National Pollutant Discharge Elimination System (NPDES) coverage for stormwater discharges prior to beginning construction or land disturbance (1) above the Ordinary High Water Mark, (2) for any non-dredge/fill operations below the Ordinary High Water Mark, (3) construction of associated upland dredge disposal sites that will equal or exceed one (1) acre in size, and/or (4) recovery, removal, re-mining, processing, etc. of material from disposal areas or other sites/areas regardless of size. The regulations also require NPDES registration for disturbance activities less than one (1) acre that are part of, adjacent to, or associated with a larger common plan of development or sale, that may eventually equal or exceed one (1) acre, or if less than one (1) acre in size if stormwater discharges have reasonable potential to be a significant contributor of pollutants to a water of the State or have reasonable potential to cause or contribute to a violation of applicable Alabama water quality standards as determined by ADEM. The regulated construction disturbance also includes, but is not limited to, associated areas utilized for support activities such as vehicle parking, equipment or supply storage areas, staging areas, disposal areas, material stockpiles, temporary office areas, and access roads, and pre-construction activities performed in advance or in support of construction such as logging, clearing, and dewatering. Please be advised that a registrant, operator/owner, contractor, or other responsible entity, separately or collectively, must retain NPDES registration coverage for phased developments until all disturbance activity, including phased construction, is complete. Information regarding registration under ADEM Admin. Code Ch. 335-6-12 for discharge of treated stormwater from regulated construction, construction materials management, small non-metallic, noncoal mining, processing and related activity can be viewed/downloaded from the ADEM webpage at www.adem.state.al.us/FieldOps/Permitting/Construction/Construction.htm .

4. All terms, conditions, and requirements of any NPDES permit in effect at the facility must be followed and maintained. Failure to comply with applicable NPDES rules and/or permit coverage may constitute a violation of this certification.

5. Valid NPDES individual or general permit coverage for stormwater discharges resulting from the operation of a service dock, commercial/private marina, transportation/transloading facility, port/docks facility, landfills, or industrial/manufacturing facilities may be required. If you have any questions regarding the requirement for NPDES permit coverage, please contact ADEM's Water Division, Industrial Section at (334) 271-7700.

6. Valid NPDES permit coverage for stormwater discharges is required prior to commencement of operation of a coal, aggregate, crushed stone, chert, dirt, or other ore, mineral, or material mining/borrow, transloading, storage, screening, or barge loading facility. If you have any questions regarding the need for stormwater permit coverage or would like to request application forms/information, please contact ADEM's Mining & Nonpoint Source Section by email at mnps@adem.state.al.us or by phone at (334) 394-4311.

7. The applicant/owner/operator shall ensure that fill material sources and/or associated borrow/mining sites have obtained appropriate NPDES permit coverage. If you have any

questions regarding the need for the applicant to obtain stormwater permit coverage, to determine if the contractor has obtained stormwater permit coverage, or would like to request application forms/information, please contact ADEM's Mining & Nonpoint Source Section by email at mnps@adem.state.al.us or by phone at (334) 394-4311.

8. ADEM air permit coverage may be required for certain barge loading/unloading operations. If you have any questions regarding the requirement for air permit coverage, please contact ADEM's Air Division at (334) 271-7700.

9. The applicant/owner/operator shall ensure that activities are in compliance with ADEM Land Division regulations for the permitting/management/removal/remediation or use of any hazardous, toxic, and/or solid waste on the site. Please contact ADEM's Land Division at (334) 271-7730 if you have any questions, or to request additional information.

10. The applicant shall implement the project in accordance with all plans, designs, specifications, descriptions, drawings, schedules, maps, and other information submitted relative to the proposed project.

11. Upon the loss or failure of any treatment facility, best management practice (BMP), or other control, the applicant shall, where necessary to maintain compliance with this certification, suspend, cease, reduce or otherwise control work/activity and all discharges until effective treatment is restored. It shall not be a defense for the applicant in a compliance action that it would have been necessary to halt or reduce work or other activities in order to maintain compliance with the conditions of this certification.

12. The applicant shall retain records adequate to document activities authorized by this certification including but not limited to, inspection reports, monitoring information, copies of any reports and all data used to complete the above reports or the application for this certification, for a period of at least three years after completion of work/activity authorized by the certification. Upon written request, the applicant shall provide ADEM with a copy of any record/information required to be retained by this paragraph.

13. The applicant shall implement and maintain a comprehensive BMP plan for prevention and control of nonpoint sources of pollutants during and after project implementation, including measures that will be taken to ensure permanent revegetation or cover of all disturbed areas during and after project implementation that was submitted as part of the application or required by this certification.

14. The applicant shall implement and maintain appropriate, effective BMPs for prevention and control of nonpoint sources of pollutants during and after project implementation. The applicant, at a minimum, must implement and maintain applicable effective BMPs as provided in the *Alabama Handbook For Erosion Control, Sediment Control, And Stormwater Management On Construction Sites And Urban Areas*, as amended, Alabama Soil and Water Conservation Committee (ASWCC). A copy of the Handbook can be downloaded or ordered at http://swcc.state.al.us/erosion_handbook.htm Immediately after completion of the project, the applicant is required to implement and maintain effective measures to ensure permanent revegetation or cover of all disturbed areas.

15. The applicant shall implement a Spill Prevention Control and Countermeasures (SPCC) Plan for all temporary and permanent onsite fuel or chemical storage tanks or facilities consistent

with the requirements of ADEM Admin. Code R. 335-6-6-.12(r), Section 311 of the Federal Water Pollution Control Act, and 40 CFR Part 112. The applicant shall maintain onsite or have readily available sufficient oil & grease absorbing material and flotation booms to contain and clean-up fuel or chemical spills and leaks. The applicant shall immediately notify ADEM after becoming aware of a significant visible oil sheen in the vicinity of the proposed activity. In the event of a spill with the potential to impact groundwater or other waters of the State, the applicant should immediately call the National Response Center at 1-800-424-8802 and the Alabama Emergency Management Agency at 1-800-843-0699. The caller should be prepared to report the name, address and telephone number of person reporting spill, the exact location of the spill, the company name and location, the material spilled, the estimated quantity, the source of spill, the cause of the spill, the nearest downstream water with the potential to receive the spill, and the actions taken for containment and cleanup.

16. Until the project is complete, the applicant shall conduct, at a minimum, weekly comprehensive site inspections to ensure that effective BMPs are properly designed, implemented, and regularly maintained (i.e. repair, replace, add to, improve, implement more effective practice, etc.) utilizing good engineering practices to prevent/minimize to the maximum extent practicable discharges of pollutants in order to provide for the protection of water quality. The inspections shall be conducted by a qualified credentialed professional (QCP), qualified personnel under the direct supervision of a QCP, or an ADEM recognized qualified credentialed inspector (QCI), until completion of the proposed activity.

17. Additional, effective BMPs shall be fully implemented and maintained on a daily basis as needed to prevent to the maximum extent possible potential discharges of pollutants from activities authorized by this certification, directly to or to a tributary or other stream segment, that have the potential to be impact a State water currently considered impaired [waterbody is identified on the Alabama 303(d) list, a total maximum daily load (TMDL) has been finalized for the waterbody, and/or the waterbody is otherwise considered a Tier 1 water pursuant to ADEM Admin. Code Ch. 335-6-10]. The applicant shall inspect all BMPs as often as is necessary (daily if needed) for effectiveness, need for maintenance, and the need to implement additional, effective BMPs. Additional effective BMPs shall immediately be implemented as needed and may include but are not limited to sediment retention basins, greater capacity in sediment retention structures, hydroseeding with application of non-toxic tackifiers, grass sodding, non-toxic chemical treatment, erosion control blankets, other effective innovative/alternative technologies, etc. to ensure full compliance with ADEM requirements and the protection of water quality in the impaired waterbody.

18. All construction and worker debris (e.g. trash, garbage, etc.) must be immediately removed and disposed in an approved manner. If acceptable offsite options are unavailable, effective onsite provisions for collection and control of onsite worker toilet wastes or gray waste waters (i.e. port-o-let, shower washdown, etc.) must be implemented and maintained. Soil contaminated by paint or chemical spills, oil spills, etc. must be immediately cleaned up or be removed and disposed in an approved manner. Also, the applicant shall manage and dispose of any trash, debris, and solid waste according to applicable state and federal requirements.

19. Appropriate measures must be taken to prevent the deposition of airborne pollutants such as spray paint, herbicides, excessive road dust, etc. from entering the waterbody.

20. Appropriate measures must be taken to prevent the disposal, minimize to the maximum extent practicable the deposition, and remove as necessary, any material, debris, or liquids resulting

from bridge/culvert, building, or other construction and/or maintenance such as waste concrete/cement, wash water, surfactants, sand blasting particles, paint, etc. from falling into or entering the waterbody.

21. Surface drainage patterns should be designed, constructed, and maintained to the extent practicable with swales or other methods to minimize direct runoff into the waterbody and to prevent/minimize the introduction of pollutants. Diversion structures (berms, ditches, etc.) created in order to re-route upgradient stormwater runoff from the proposed project location shall be constructed, stabilized, and vegetated as necessary, prior to commencement of disturbance activities.

22. All materials used as fill, or materials used for construction of structures in a waterbody, must be non-toxic, non-leaching, non-acid forming, and free of solid waste or other debris.

23. The applicant shall implement appropriate measures to minimize the potential for a decrease of instream dissolved oxygen concentrations as a result of project implementation. In addition, the applicant shall ensure that the activities authorized by this certification do not significantly contribute to or cause a violation of applicable water quality standards for instream dissolved oxygen.

24. Dredged or fill material shall not be sidecast or otherwise placed in adjacent waters or wetlands outside the permitted project area.

25. The applicant shall conduct the proposed operation in a timely manner with all due diligence utilizing good engineering practices in order to reduce potential environmental impacts created by the project to the maximum extent practicable and to reduce the amount of time to the maximum extent practicable in which turbid water is produced.

26. The applicant shall implement appropriate, effective BMPs, including installation of floating turbidity screens as necessary, to minimize downstream turbidity to the maximum extent practicable. The applicant shall visually monitor or measure background turbidity. The applicant shall temporarily suspend operations should turbidity resulting from project implementation exceed background turbidity by more than 50 NTUs. Operations may resume when the turbidity decreases to within acceptable levels.

27. To ensure the protection of water quality, the applicant shall evaluate, characterize, and as necessary, conduct analysis of any material dredged/removed/disturbed in order to ensure that potential pollutants are not present in concentrations that could cause or contribute to a violation of applicable water quality standards. Information regarding the evaluation, characterization, or detailed results of any analyses shall be made available to ADEM upon request.

28. If upland disposal areas are utilized, the applicant shall be responsible for the condition of the spoil disposal area, including the structural integrity of any embankments, for the life of the dredging and disposal activity and until the disposal area is reclaimed or adequately stabilized, and for pumping and discharge rates, to ensure settling of suspended solids within the confines of the spoil disposal area sufficient to ensure that turbidity in the return water will not cause substantial visible contrast with the receiving waters, or result in an increase of 50 NTUs above background turbidity levels in the receiving waters.

29. Unless specifically authorized in writing by ADEM, subsequent recovery, removal, re-mining, processing, trans-loading, etc. of material from upland disposal areas is not authorized by this certification, and appropriate NPDES permit coverage [ADEM Admin. Code Ch. 335-6-12 and/or ADEM Admin. Code Ch. 335-6-9] is required to be obtained from ADEM prior to commencing and/or continuing recovery, removal, re-mining, processing, trans-loading, etc. of material from upland disposal areas or other sites/areas. If you have any questions regarding NPDES permit requirements for material mining, re-mining, recovery, removal, borrow sites, or would like to request application forms/information, please contact ADEM's Mining & Nonpoint Source Section by email at mnps@adem.state.al.us or by phone at (334) 394-4311.

30. New or updated marinas, multiple boat slips, floating docks, large or multiple piers, etc. that increase the number of berthing areas shall be equipped with all facilities and appurtenances (i.e. trash receptacles, receptacles for fish offal and carcasses, and accepted SPCC plan for fueling facilities, and a sewage pump out system where appropriate) for activities that are allowed or conducted at the new or updated facility as appropriate.

31. Bilge or ballast water pumped from ships or boats (e.g. dredge or construction barges, tugboats, fishing boats, pleasure craft, etc.) shall not be discharged to waters of the State of Alabama without removal of solids, oils, fuel, petroleum by-products and toxic compounds.

32. No rubbish, trash, garbage, or other such materials shall be discharged overboard into waters of the State of Alabama. Litter and refuse from vessels or a marina shall be disposed in a manner consistent with State and local regulations (e.g. trash receptacles, receptacles for fish offal and carcasses).

33. Toilet wastes, domestic wastewater, and other domestic wastes must be pumped out to an approved onsite sewage system or municipal sewer, or must be treated by an approved marine sanitation device prior to discharge to waters of the State of Alabama.

34. Any proposed temporary channel, pipe, conduit, or other management measures implemented to temporarily divert stream flow to accommodate culvert construction, stream crossings, pipelines, or other within-bank stream work shall be constructed and maintained at all times to ensure that water quality is not adversely impacted. The measures to protect water quality during the construction of the temporary diversion channel may include but is not limited to, temporarily blocking/impounding and pumping water around the construction area, construction of a temporary channel lined with plastic or rip-rap, temporary installation of a properly sized pipe, etc.

35. Any proposed new or modified permanent waterbody channel should duplicate the old waterbody channel or a natural waterbody channel in regard to pools, riffle areas, riparian vegetation, depth, gradient, and length to the maximum extent practicable so that the new/modified waterbody channel maintains its dimension, pattern, and profile while neither degrading nor aggrading to ensure that water temperature, pH, turbidity, and dissolved oxygen concentrations are not adversely impacted, and are improved to the extent possible, after the project is completed.

36. Permanent or temporary raised waterbody crossings must be constructed with pipe(s)/culvert(s) to safely pass expected mean water flow of the waterbody for the time of year and length of time that they are installed, unless a properly designed and constructed low-water crossing is installed that provides for unobstructed stream flow over the low-water

structure. The crossing must be inspected on a regular basis and any significant debris or blockage removed and properly disposed to ensure unobstructed flow of water. Placement of raised rock-fill or other fill without pipe(s)/culvert(s) for passage of water is not acceptable. Each raised waterbody crossing must be designed and maintained to ensure structure integrity and stability for safe passage of water flow generated by expected precipitation events while the structure is in place.

37. The bottom of any proposed new or modified, temporary or permanent waterbody channel, culvert, ditch, or pipe should be V-notched, sloped, concave in shape, or otherwise constructed with a base flow channel or configuration, to ensure adequate concentrated and unobstructed flow of water during periods of low flow. Alternatively, the bottom of the culvert/structure can be buried at a sufficient depth considering the hydraulic gradient of the existing channel to provide for a stable sediment streambed through the culvert/structure, or a bottomless culvert can be installed where the stream bottom is bedrock or as otherwise determined suitable by the design engineer.

38. Design features, such as protection of existing waterbody trees or planting of new shade trees or other appropriate measures, should be implemented to the maximum extent practicable in order to minimize temperature extremes in any new or modified permanent waterbody channel.

39. Please be advised that **(A)** ADEM Admin. Code R. 335-6-6-.03 (aaa) [NPDES Rules] defines "Waters of the state" as all waters of any river, stream, watercourse, pond, lake, coastal, ground or surface water, wholly or partially within the state, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership or corporation unless such waters are used in interstate commerce, **(B)** ADEM Admin. Code R. 335-6-9-.02(i) [Surface Mining Rules] defines "stream" as any body of water having a drainage area in excess of one square mile [640 acres], **(C)** Pursuant to ADEM Admin. Code R. 335-6-12-.21(10) [Construction Stormwater Rules], the installation or use of instream or within-bank sediment storage traps or deposition areas, or other sediment storage/detention BMPs, in waters of the State to control/treat stormwater runoff from construction/ activity, is not authorized, and **(D)** ADEM Admin. Code R. 335-6-12-.21(2)(b)3. [Construction Stormwater Rules], requires proper cleanup/removal or effective stabilization of sediment deposited offsite, in the event of such an occurrence, and effective remediation of sediment or other pollutant instream impacts to the maximum extent practicable.

40. In recognition that projects are site specific in nature and conditions can change during project implementation, ADEM reserves the right to require the submission of additional information or require additional management measures to be implemented, as necessary on a case by case basis, in order to ensure the protection of water quality.

41. Liability and responsibility for compliance with this certification are not delegable by contract or otherwise. The applicant shall ensure that any agent, contractor, subcontractor, or other person employed by, under contract, or paid a salary by the applicant complies with this certification. Any violations resulting from the actions of such person shall be considered violations of this certification and may subject the applicant to enforcement action.

42. ADEM certification decisions are predicated on current regulatory requirements, established engineering standards and technical considerations, best management practices information,

and formal administrative procedures in conformance with ADEM regulations and applicable Alabama law. Issuance of a certification by ADEM neither precludes nor negates an operator/owner's responsibility or liability to apply for, obtain, or comply with other ADEM, federal, state, or local government permits, certifications, licenses, or other approvals.

43. This certification does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, trespass, or any infringement of Federal, State, or local laws or regulations, and in no way purports to vest in the applicant title to lands now owned by the State of Alabama nor shall it be construed as acquiescence by the State of Alabama of lands owned by the State of Alabama that may be in the applicant's possession.

Should you have any questions on this or related matters, please do not hesitate to contact Richard Hulcher, Mining & Nonpoint Source Section, by email at mnps@adem.state.al.us or by phone at (334) 394-4311.

Sincerely,

Steven O. Jenkins, Chief
Field Operations Division

SOJ/rh
File: WQ401
c: Wetlands Section, EPA Region IV