

UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF FLORIDA
MIAMI DIVISION

CASE NO. 03-23427-CIV-(HOEVELER)

SIERRA CLUB, NATURAL RESOURCES
DEFENSE COUNCIL, NATIONAL PARKS
CONSERVATION ASSOCIATION,

Plaintiffs,

vs.

ROBERT B. FLOWERS, Chief of
Engineers, U.S. Army Corps of
Engineers, and STEVE WILLIAMS,
Director, U.S. Fish and Wildlife
Service; and MIAMI-DADE LIMESTONE
PRODUCTS ASSOCIATION, INC., VECELLIO
& GROGAN, INC., TARMAC AMERICA LLC,
FLORIDA ROCK INDUSTRIES, INC.,
SAWGRASS ROCK QUARRY, INC., APAC-
FLORIDA, INC., and RINKER MATERIALS
OF FLORIDA, INC.,

Defendants/Defendant-Intervenors.

AFFIDAVIT OF FLORIDA DEPARTMENT OF TRANSPORTATION'S
CHIEF ENGINEER, ANANTH PRASAD, P.E.

STATE OF FLORIDA

COUNTY OF LEON

BEFORE ME, the undersigned authority, on this day personally
appeared Ananth Prasad, P.E., the Chief Engineer of the Florida
Department of Transportation, who, after being duly sworn, deposes
and says:

1. My name is Ananth Prasad, P.E., the Chief Engineer of the Florida Department of Transportation (hereafter "Department"), whose principal address is 605 Suwannee Street, Tallahassee, Florida 32301. I have been in that position since August, 2005. Prior to that, I was the Department's Director of Construction from September 2002 to August 2005. I have been an employee of the Department since 1991. I have been a registered professional engineer in the State of Florida since 1995.

2. As Chief Engineer, one of my responsibilities is to oversee the operations of the Department's State Materials Office. The State Materials Office is located in Gainesville, Florida, and is responsible for testing, research, inspection, and evaluation of materials used in Florida's transportation system. The office also certifies mines producing materials for use on Department projects. In addition, I am responsible for oversight of all highway construction by the Department which entails administration, inspection, and testing of such contracts.

3. The Florida Department of Transportation interacts with mining companies in Florida in several capacities. First, Department road building contractors are the end users of limestone aggregate mined in Florida in the form of base rock (the underlying support for the roadway), aggregates for asphalt in roadways, aggregates for Portland cement concrete pavements, specialty

aggregates for "Superpave" structural pavement layers, Friction Course wearing surfaces, aggregates for concrete in structures such as bridges, utility poles, sidewalks, underground drainage pipes, rip rap stone for protection of bridges and steep slopes, and aggregate for drain fields and filtration products (collectively "aggregate"). Second, the aggregate producers certify the production of mined aggregate to ensure that the quality is suitable for the Department's construction program. The Department's aggregate source regulations are contained in Rule 14-103, Florida Administrative Code, a copy of which is attached as Exhibit A.

4. Developing new sources of material in Florida is a time consuming process and is not a viable option for replacing aggregate from the Lake Belt mines because of quality, quantity, and distribution limitations. Once an aggregate producer evaluates actual in-ground deposits of limestone rock, the Department's aggregate source approval program evaluates and approves a quality control program to ensure consistent extraction and shipment of mined aggregate that will meet Department specifications, and implements quality assurance testing by the Department to ensure that the quality control program is properly functioning. This process is set forth in the diagram appended hereto as Exhibit B. Typically, the process takes 36 to 48 months from the time that a

deposit of limestone is initially evaluated by the owner to the time that the mine is producing aggregate for use on Department jobs.

5. For the past 40 years, approximately 50% of the aggregate used by the Department has come from the mines in the Lake Belt region (hereafter the "Lake Belt mines") by virtue of the quantity and quality of the aggregate mined there, and the rail and truck distribution network that permits shipments to the following distribution terminal locations: Palmetto, Largo, Tampa, Winter Haven, Orlando, Cocoa Beach, Wildwood, Ocala, Daytona Beach, Debary, and Jacksonville. From these terminals, Department construction projects in nearly all parts of Florida draw material. As shown in the map attached as Exhibit C, the rail and ship aggregate distribution network in Florida is directly tied to the Lake Belt mines.

6. Eliminating production of aggregate from the Lake Belt mines will have an immediate, drastic, and long-lasting impact on the Department's ability to maintain and improve the State Highway System. The Department will be unable to complete current construction projects for an indefinite period of time, and completion will ultimately be much more expensive. The lack of aggregate and the increased costs will delay and in some instances cause cancellation of on-going and future construction projects.

7. Attached are documents explaining the impact on the Department's projects if the Lake Belt mines are closed. For reference purposes Exhibit D is a map showing all Department Districts. Exhibit E is a spreadsheet showing a summary of costs remaining on current Department projects using asphalt and/or concrete mixes that are drawing materials from the Lake Belt mines. Existing projects with original contract amounts of \$2.9 billion will be suspended for lack of aggregate if the Lake Belt mines close. Exhibit F indicates the percentages by Department District of expected projects in the next six months that will not move forward due to aggregate loss. For the next six months, the impact will postpone future projects totaling over \$1.7 billion. These figures represent over 50% of the Department's construction program. Exhibit G, a Program Plan History spreadsheet, contains total amounts spent by the Department for the past five fiscal years on capacity and preservation projects. The statewide impact on total Department production is illustrated in the map appended as Exhibit H. Notably, in Monroe, Miami-Dade, Broward, Palm Beach, Martin, Indian River and St. Lucie counties there will be 100% interruption of Department construction.

8. Stopping work on a Department construction project will create additional safety challenges for an extended period of time. Highway work zones create driver distractions and additional

congestion. In these zones the Department has to have maintenance of traffic plans in place during construction. Although the Department takes all due care in approving such plans, where a lane or lanes of traffic have been closed, all traffic must use the remaining lanes, which inevitably leads to more traffic congestion. The longer a work zone exists, the longer the additional safety issues exist.

9. The Lake Belt area of Miami-Dade County contains durable limestone rock that makes aggregate products of high quality particularly for the Department's roadway design and for skid resistant wearing surfaces. This statement is based in part upon the hardness of the material measured by the Los Angeles Abrasion test (a nationally-recognized standard), the ability of the materials to perform well in "Superpave" asphalt mixes for high-volume roadways, e.g. the Interstate system, and the presence of significant amounts of silica. Superpave is a durable and skid-resistant pavement surface that reduces and prevents hydroplaning conditions, and has been used by the Department for resurfacing projects since 1994. The Lake Belt is the dominant source of Superpave and skid resistant surfacing and resurfacing aggregates in the state.

10. The Department has conducted research and development activities for more than 30 years to develop pavement designs that

are durable and resistant to rutting and polishing by traffic. Aggregates research by private companies and by governmental agencies including the Department, the Florida Geological Survey and the former United States Bureau of Mines has identified areas of the state where limestone and dolomitic rock formations are present and may be suitable for specific aggregates. While other aggregate sources have been developed to supply lower quality base rock and aggregate requirements in local construction markets, the mines in other parts of the state are producing only a fraction of the amount of similar quality rock and cannot be expected to produce the quantity of materials needed for construction requirements in the near future. Also, these other mines in many cases distribute aggregate by trucks, and this is a more labor intensive method, and far slower, than the rail distribution network serving the Lake Belt mines.

11. Even before the Lake Belt mines production was questioned, the Department was experiencing a high demand for construction aggregate and therefore attempting to develop new sources of material. The effects of the previous two hurricane seasons and higher demand have already caused construction costs to rise and construction delays due to material unavailability. Department material costs have risen sharply over the past two fiscal years respectively: 23% and 60% for base, 65% and 109% for

earthwork, 22% and 14% for asphalt, and 33% and 88% for concrete. Ceasing production in the Lake Belt mines will compound this problem.

12. Rail shipments from mines in other states are limited and not expected to be feasible to provide the tonnage of materials that would be required to replace all the aggregate products produced from the Lake Belt mines. Rail companies are limited by inventories of track and cars, and are not expected to upgrade in the near future. Even assuming that out-of-state production could increase and that distribution could occur, the price differential for out-of-state aggregates as a replacement for Lake Belt materials will be significant.

13. Aggregate mines are located near waterways in many areas of the United States and in other countries and are a potential source for materials used by the Department. There is a significant supply of limestone available from Mexico, but it does not meet skid resistant standards and cannot replace Lake Belt aggregate. Hard rock aggregates from igneous and metamorphic rock sources from Canada will meet the skid requirements and can be brought in by vessel. However, these long-distance supplies command a premium price, and it is extremely unlikely that supplies from these sources can be increased in the near term due to logistical constraints. In short, there are not enough ships

available.

14. At this time it is not anticipated that it would be possible to replace the Lake Belt mines' current production within five years, if then.

15. All statements herein are based upon my personal knowledge and experience, or information researched at my direction and under my supervision.

FURTHER AFFIANT SAYETH NAUGHT.

ANANTH PRASAD, P.E., CHIEF ENGINEER
FLORIDA DEPARTMENT OF TRANSPORTATION

_____ The affiant is personally known to me.

_____ The affiant produced the following identification:
_____.

SUBSCRIBED AND SWORN to me this

_____ day of _____, 2006.

NOTARY PUBLIC STATE OF FLORIDA

My commission expires: