

**Attachment D**

**Microbiological Organisms Correspondence**

**PAGE INTENTIONALLY LEFT BLANK**

<u>Letter</u>	<u>Page</u>
C R. Pierce, Southern Company, to James A. Warr, ADEM .....	<b>D-1</b>
James McIndoe, ADEM, to C. R. Pierce, Southern Company .....	<b>D-4</b>
Jim Davis, Southern Company, to Neal Sass, Alabama Department of Public Health .....	<b>D-5</b>
Neal Sass, Alabama Department of Public Health, to Jim Davis, Southern Company .....	<b>D-6</b>
C. R. Pierce, Southern Company, to Allan Hallum, GADNR .....	<b>D-7</b>
Alan W. Hallum, GADNR, to C. R. Pierce, Southern Company .....	<b>D-10</b>

**PAGE INTENTIONALLY LEFT BLANK**

Southern Nuclear  
Operating Company, Inc.  
P. O. Box 1295  
Birmingham, Alabama 35201-1295  
Tel 205.992.5000



May 7, 2002

James W. Warr  
Director  
Watershed Planning and Monitoring Program  
Environmental Protection Division  
Alabama Department of Environmental Management  
P.O. Box 301463  
Montgomery, AL 36130-1463

Re: Joseph M. Farley Nuclear Plant License Renewal  
Request for Information on *Naegleria fowleri* in the Chattahoochee River

Dear Mr. Warr:

Southern Nuclear Operating Company (SNC) is consulting with your office to determine whether there is any concern about the potential existence or concentration of the free-living amoebae *Naegleria fowleri* in the Chattahoochee River at the Joseph M. Farley Nuclear Plant (FNP) location.

SNC is preparing an application to the Nuclear Regulatory Commission (NRC) for renewal of the FNP operating licenses. License renewal would authorize an additional 20 years of operation beyond the current license expiration dates in 2017 (Unit 1) and 2021 (Unit 2). NRC requires license renewal applicants to "assess the impact of the proposed action (i.e., license renewal) on public health from thermophilic organisms in the affected water" (10 CFR 51.53). NRC license renewal guidance and supporting documentation focus on *N. fowleri* and suggest consulting with the cognizant State agency.

FNP is located in the southeastern corner of Alabama, on the west side of the Chattahoochee River in Houston County, 16.5 miles directly east of Dothan (latitude N31°17'21.23", longitude W85°6'41.93" for Unit 1 and N31°13'24.01", W85°6'41.93" for Unit 2) (Figure 2-1). The plant discharges into the Chattahoochee River. Discharge limits and monitoring requirements for FNP are set forth in its National Pollutant Discharge Elimination System permit, AL0024619, and FNP discharge temperatures do not exceed 97 °F. SNC does not expect plant operations and cooling systems to change significantly over the license renewal term and SNC has no plans to increase the discharge temperature.

SNC understands that FNP discharge temperatures are less than those known to be optimal for growth and survival of thermophilic human pathogens such as *N. fowleri*. SNC is not aware of any information that suggests any concern about *N. fowleri* concentrations in the river. In

accordance with NRC guidance, however, we are consulting with your office for any information that it has on the topic. Please indicate back to us whether your office has any concerns regarding the operation of the plant.

Please feel free to contact Mr. Jim Davis at (205) 992-7692 if you have any questions or require any additional information. We would appreciate your input by June 16, 2002 to enable us to meet our application deadline.

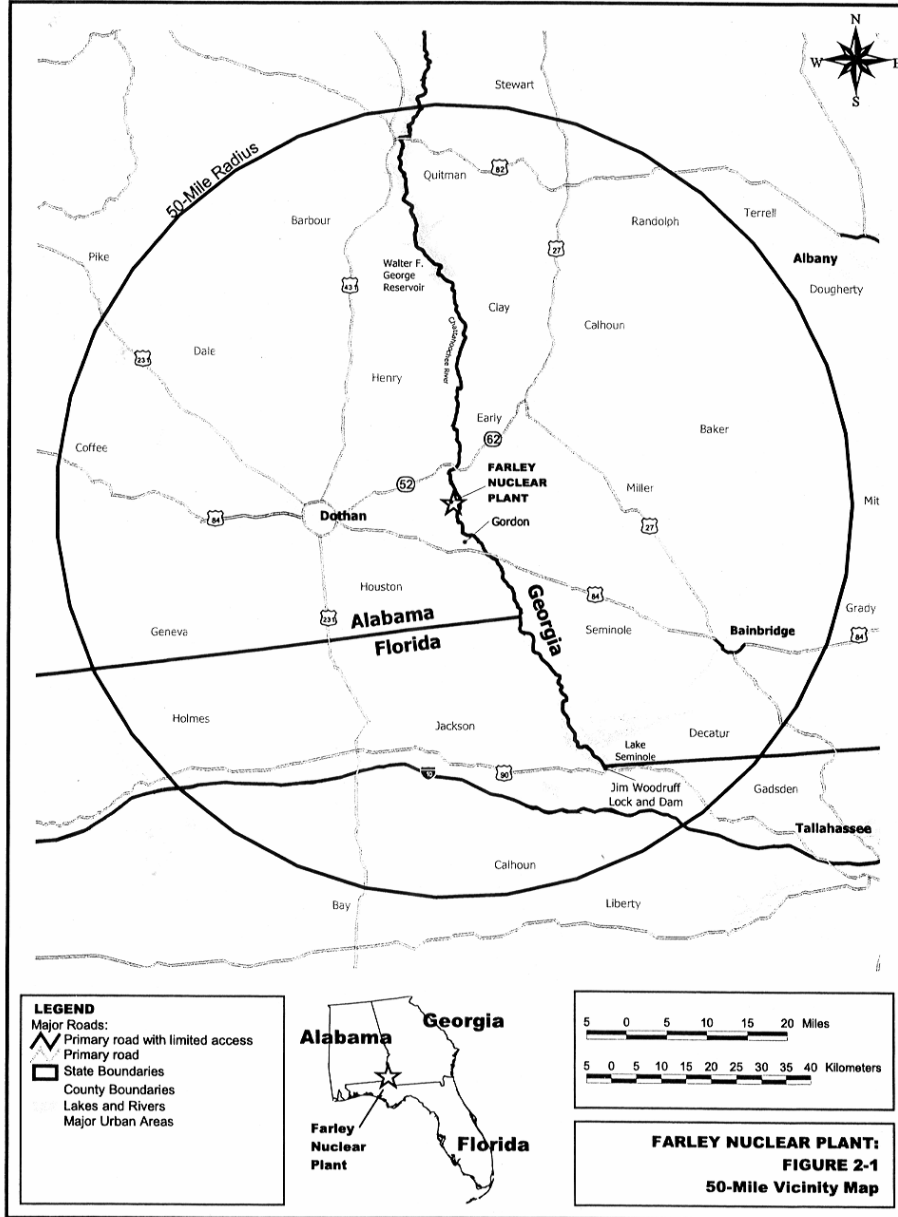
Sincerely,



C. R. Pierce  
License Renewal Services Manager

Enclosure: Figure 2-1

cc: L. M. Stinson  
M. J. Ajluni  
W. C. Carr  
T. C. Moorer  
J. T. Davis



# ADEM



## ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

POST OFFICE BOX 301463 36130-1463 ♦ 1400 COLISEUM BLVD. 36110-2059

MONTGOMERY, ALABAMA

WWW.ADEM.STATE.AL.US

(334) 271-7700

JAMES W. WARR  
DIRECTOR

DON SIEGELMAN  
GOVERNOR

August 21, 2002

Mr. C. R. Pierce  
License Renewal Services Manager  
Southern Nuclear Operating Company, Inc.  
P.O. Box 1295  
Birmingham, AL 35201-1295

Facsimiles: (334)  
Administration: 271-7950  
General Counsel: 394-4332  
Air: 279-3044  
Land: 279-3050  
Water: 279-3051  
Groundwater: 270-5631  
Field Operations: 272-8131  
Laboratory: 277-6718  
Mining: 394-4326  
Education/Outreach: 394-4383

Dear Mr. Pierce:

This is in response to your letter of May 7, 2002, requesting information or concerns that the Alabama Department of Environmental Management may have regarding the possible existence of the free-living amoebae *Naegleria fowleri* in the Chattahoochee River at the Farley Nuclear Plant. We have no information regarding the existence or concentration of *N. fowleri* in the Chattahoochee River, and suggest that you contact the Alabama Department of Public Health (if you have not done so).

If you have additional questions or need additional information, please contact Mr. Lynn Sisk at (334) 271-7826.

Sincerely,

James McIndoe, Deputy Chief  
Water Division

JM/LS/nf

Birmingham Branch  
110 Vulcan Road  
Birmingham, Alabama 35209-4702  
(205) 942-6168  
(205) 941-1603 [Fax]

Decatur Branch  
2715 Sandlin Road, S.W.  
Decatur, Alabama 35603-1333  
(256) 353-1713  
(256) 340-9359 [Fax]

Mobile Branch  
2204 Perimeter Road  
Mobile, Alabama 36615-1131  
(334) 450-3400  
(334) 479-2593 [Fax]

Mobile - Coastal  
4171 Commanders Drive  
Mobile, Alabama 36615-1421  
(334) 432-6533  
(334) 432-6598 [Fax]



Printed on Recycled Paper



**Davis, James T.**

---

**From:** Davis, James T.  
**Sent:** Wednesday, January 22, 2003 11:32 AM  
**To:** 'NSass@ADPH.state.al.us'  
**Subject:** Naegleris fowleri in Chattahoochee River

Mr. Neal Sass  
Alabama Department of Public Health

As we discussed in our phone conversation Southern Nuclear is requesting any information or concerns that the Alabama Department of Public Health may have regarding the possible existence of the free-living amoebae Naegleria fowleri in the Chattahoochee River at the Farley Nuclear Plant. Please review and respond.

Thank You,

Jim Davis



Southern Nuclear  
Operating Company, Inc.  
P. O. Box 1295  
Birmingham, Alabama 35201-1295  
Tel 205.992.5000



May 7, 2002

Allan Hallum  
Chief  
Water Protection Branch  
Environmental Protection Division  
Georgia Department of Natural Resources  
4220 International Parkway  
Suite 101  
Atlanta, GA 30354

Re: Joseph M. Farley Nuclear Plant License Renewal  
Request for Information on *Naegleria fowleri* in the Chattahoochee River.

Dear Mr. Hallum:

Southern Nuclear Operating Company (SNC) is consulting with your office to determine whether there is any concern about the potential existence or concentration of the free-living amoebae *Naegleria fowleri* in the Chattahoochee River at the Joseph M. Farley Nuclear Plant (FNP) location.

SNC is preparing an application to the Nuclear Regulatory Commission (NRC) for renewal of the FNP operating licenses. License renewal would authorize an additional 20 years of operation beyond the current license expiration dates in 2017 (Unit 1) and 2021 (Unit 2). NRC requires license renewal applicants to "assess the impact of the proposed action (i.e., license renewal) on public health from thermophilic organisms in the affected water" (10 CFR 51.53). NRC license renewal guidance and supporting documentation focus on *N. fowleri* and suggest consulting with the cognizant State agency.

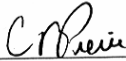
FNP is located in the southeastern corner of Alabama, on the west side of the Chattahoochee River in Houston County, 16.5 miles directly east of Dothan (Figure 2-1). The plant discharges into the Chattahoochee River. Discharge limits and monitoring requirements for FNP are set forth in its National Pollutant Discharge Elimination System permit, AL0024619, and FNP discharge temperatures do not exceed 97 °F. SNC does not expect plant operations and cooling systems to change significantly over the license renewal term. SNC has no plans to increase the discharge temperature.

SNC understands that FNP discharge temperatures are less than those known to be optimal for growth and survival of thermophilic human pathogens such as *N. fowleri*. SNC is not aware of any information that suggests any concern about *N. fowleri* concentrations in the river. In

accordance with NRC guidance, however, we are consulting with your office for any information that it has on the topic. Please indicate back to us whether your office has any concerns regarding the operation of the plant.

Please feel free to contact Mr. Jim Davis at (205) 992-7692 if you have any questions or require any additional information. We would appreciate your input by June 16, 2002 to enable us to meet our application deadline.

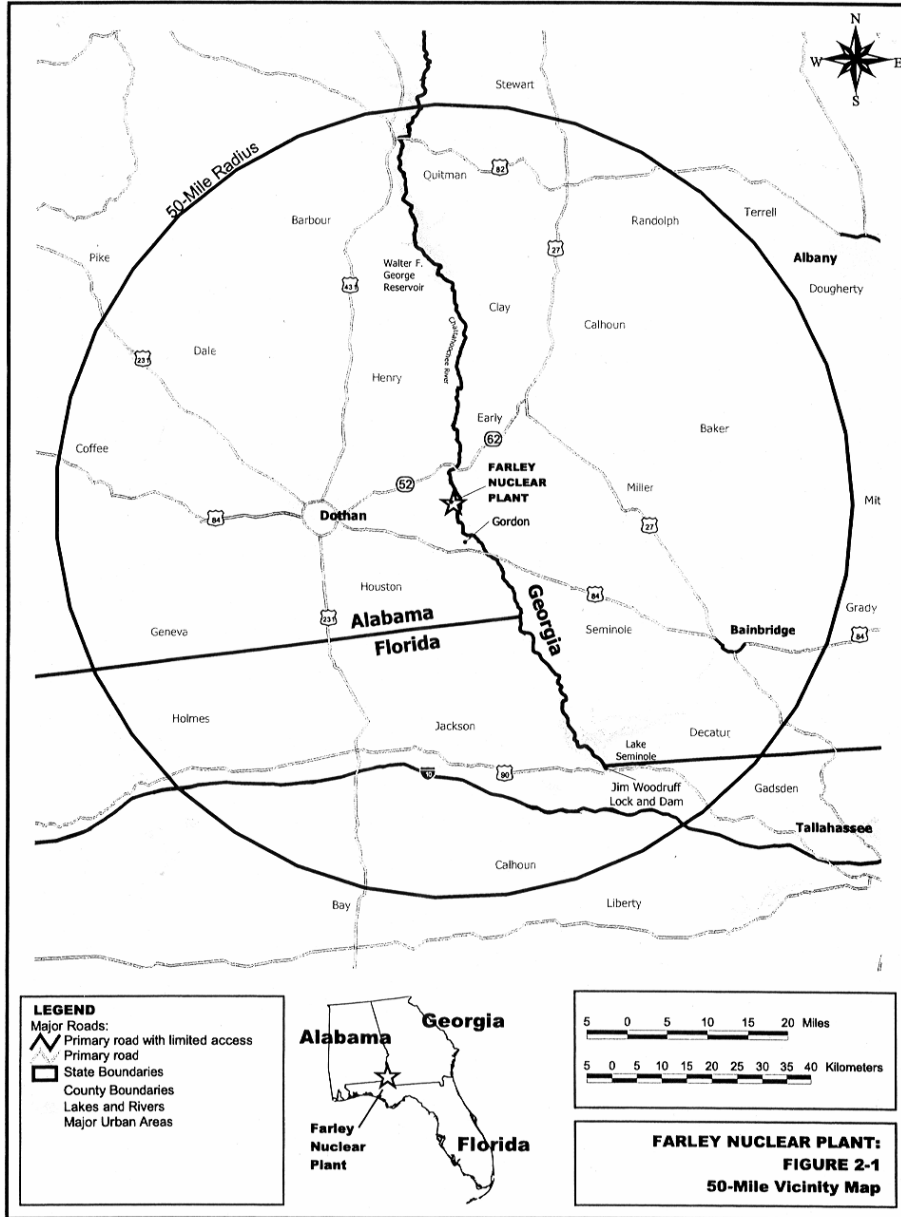
Sincerely,



C. R. Pierce  
License Renewal Services Manager

Enclosure: Figure 2-1

cc: L. M. Stinson  
M. J. Ajluni  
W. C. Carr  
T. C. Moorer  
J. T. Davis



**Georgia Department of Natural Resources**

Environmental Protection Division, Water Protection Branch  
4220 International Parkway, Suite 101, Atlanta, Georgia 30354  
Alan W. Hallum, Branch Chief  
404/675-6232  
FAX: 404/675-6247

September 11, 2002

Mr. C. R. Pierce  
License Renewal Services Manager  
Southern Nuclear Operating Company, Inc.  
P. O. Box 1295  
Birmingham, AL 35201-1295

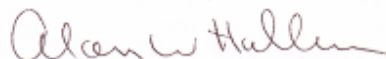
RE: J. M. Farley Nuclear Plant License Renewal  
Request for Information on *Naegleria fowleri*  
In The Chattahoochee River

Dear Mr. Pierce:

The Georgia Environmental Protection Division has never conducted any water quality monitoring to determine if *Naegleria fowleri* is present in Georgia waters. Following the death of a young boy due to infection with this organism on September 2, 2002, questions on the occurrence and risk of infection with *Naegleria fowleri* following water contact activities in Georgia have been raised. According to the Georgia Department of Human Resources, this recent death was the fourth documented case of infection in Georgia, with the suspected source of the exposure being the Oconee River near Dublin, Georgia. Based on these 4 cases, published literature documenting its common occurrence worldwide, implied documentation of its occurrence by disease cases, and field collections from various media in southern states indicates to us the probability that it is a common species in many of our waters.

Review of web-posted fact sheets from the Centers for Disease Control (CDC), and from the Florida Department of Health (copies attached), indicate that *Naegleria fowleri* is a free-living amoeba that is found worldwide, most commonly in the soil and in warm, stagnant bodies of freshwater, particularly where the temperature exceeds 86° F. The attached fact sheets indicate that cases of infection with this species from swimming in surface waters are rare. The attached fact sheets and recent news articles covering the recent case of infection in Georgia may provide information useful to your review. Should you have any further questions, please feel free to call Linda Harn of our Watershed Planning and Monitoring Program at 404/675-1647.

Sincerely,



Alan W. Hallum, Chief  
Water Protection Branch

AWH/lmh  
Attachments