

**APPENDIX C**  
**CONSULTATION LETTERS**

This appendix presents the letters of consultation between the U.S. NRC and federal and state agencies. Questions regarding these letters can be directed to Allen Fetter, U.S. NRC, Office of Federal and State Materials and Environmental Management Programs.<sup>1</sup>

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<sup>1</sup> The following letters have been reproduced from the best available copy.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

November 27, 2006

Mr. Robert L. Brooks, State Archeologist  
Oklahoma Archeological Society  
111 E. Chesapeake, # 102  
Norman, OK 73019-5111

**SUBJECT: DETERMINATION OF NO ADVERSE AFFECT ON PREHISTORIC  
RESOURCES FROM PROPOSED RECLAMATION OF SEQUOYAH FUELS  
CORPORATION'S SITE IN GORE, OKLAHOMA**

Dear Mr. Brooks:

By letter dated January 28, 2003, Sequoyah Fuels Corporation (SFC) submitted to the U.S. Nuclear Regulatory Commission (NRC), a proposed reclamation plan for its facility in Gore, OK. SFC has revised this proposed reclamation plan several times in response to questions raised by the NRC staff. The NRC staff is preparing an Environmental Impact Statement (EIS) to document its evaluation of the potential environmental impacts from SFC's proposed plan and alternatives to that plan. The EIS is being prepared in accordance with the requirements of the National Environmental Policy Act of 1969, as amended, as specified in 10 CFR Part 51 of the NRC's regulations. As part of its environmental review, the NRC staff also is considering the potential impact of the proposed plan on historic and cultural resources in accordance with the National Historic Preservation Act.

The present undertaking is the proposed reclamation of wastes produced by past site operations and of site soils and groundwater impacted by those operations. SFC is proposing to construct an onsite disposal cell to contain these wastes and impacted soils. Materials used for cell construction would be obtained from onsite sources or from nearby quarries. Maps of the site and vicinity are enclosed (Enclosure 1).

In the past, the NRC staff has consulted with your office regarding SFC's proposed decommissioning and reclamation of its site. Enclosed is your response of June 20, 2000 (Enclosure 2), in which you stated that you had no objection to decommissioning of the SFC site. Also enclosed are letters from prior consultation with the Deputy State Historic Preservation Officer (June 27, 2000), and the Cherokee Nation (August 29, 2001), regarding that proposed project (Enclosures 3 and 4). Those letters stated that there were no historic or prehistoric properties that would be affected by site reclamation. SFC's current proposed reclamation activities are similar in scope and extent to those evaluated in these earlier consultation letters.

Therefore, the NRC staff requests your concurrence with our determination that SFC's proposed action does not adversely affect any historic or prehistoric properties.

R. Brooks

2

If you have any questions, please contact Mr. James Park of my staff. Mr. Park can be reached at 301-415-5835 or by email to [jrp@nrc.gov](mailto:jrp@nrc.gov).

Sincerely,



B. Jennifer Davis, Chief  
Environmental Review Section  
Division of Waste Management  
and Environmental Protection  
Office of Federal and State Materials  
and Environmental Management Programs

Docket No. 40-8027  
License No. SUB-1010

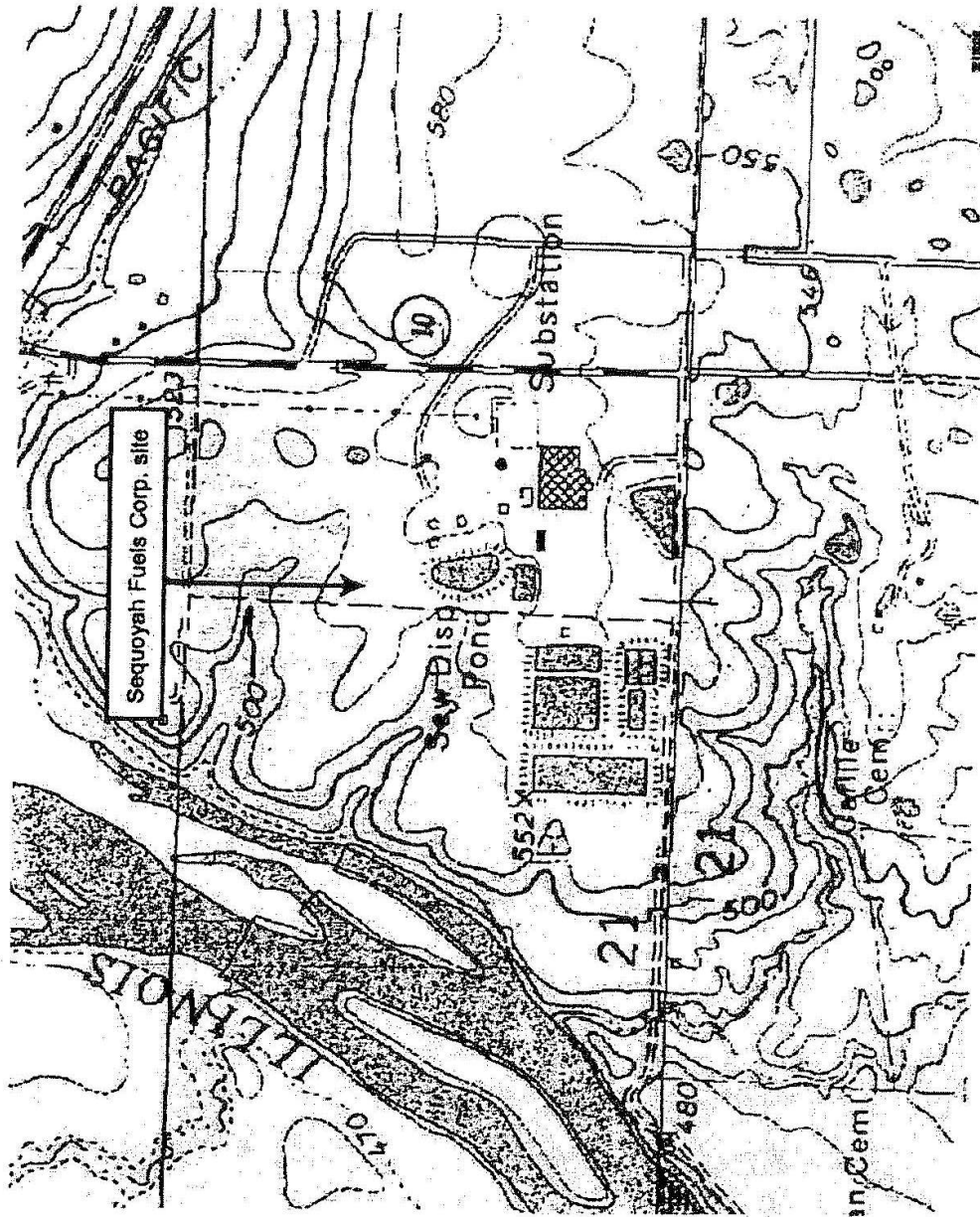
Enclosures: As stated

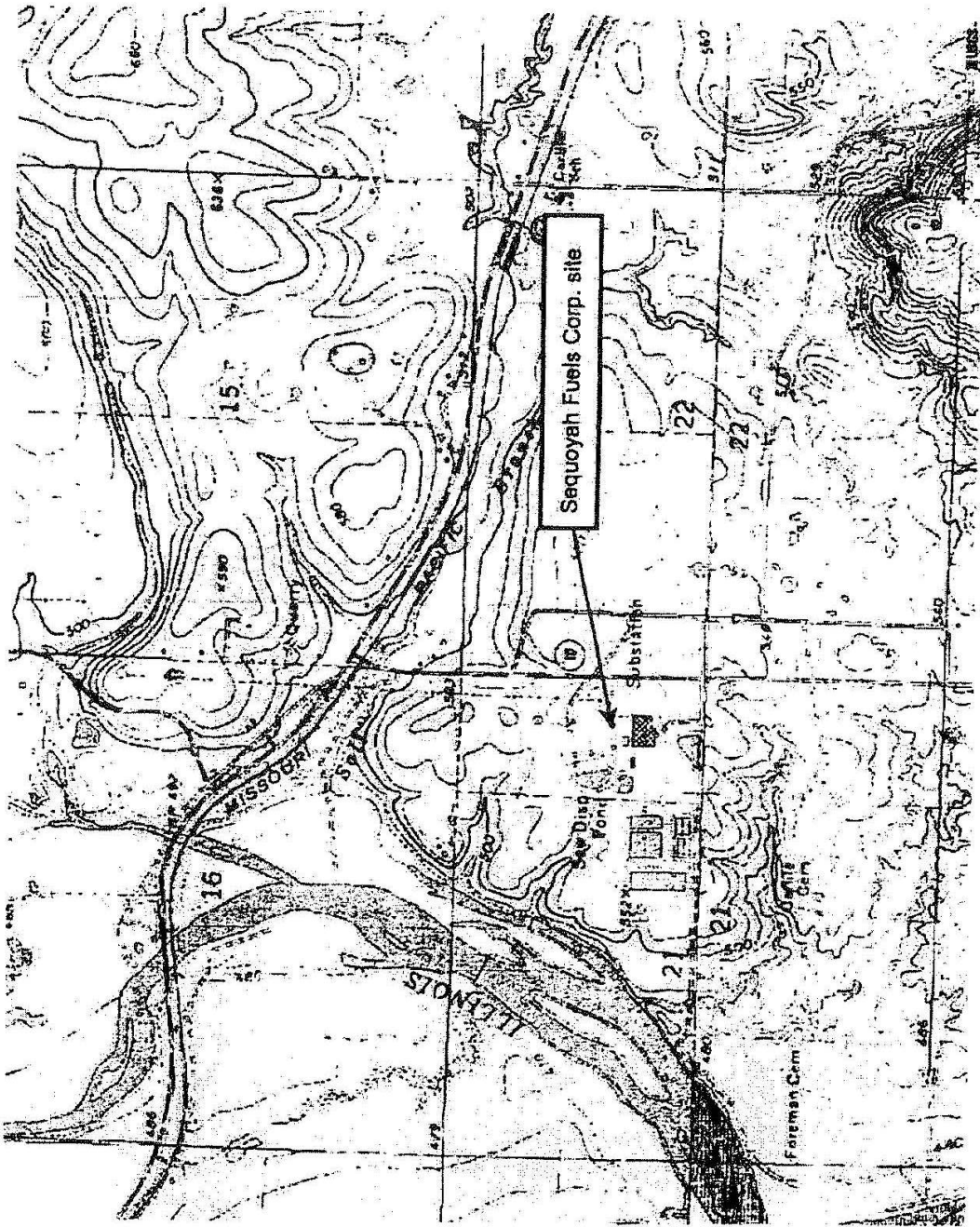
cc:  
Craig Harlin, SFC  
Melvena Heisch, OK State Historic Preservation Office  
Jeannine Hale, Esq., Cherokee Nation

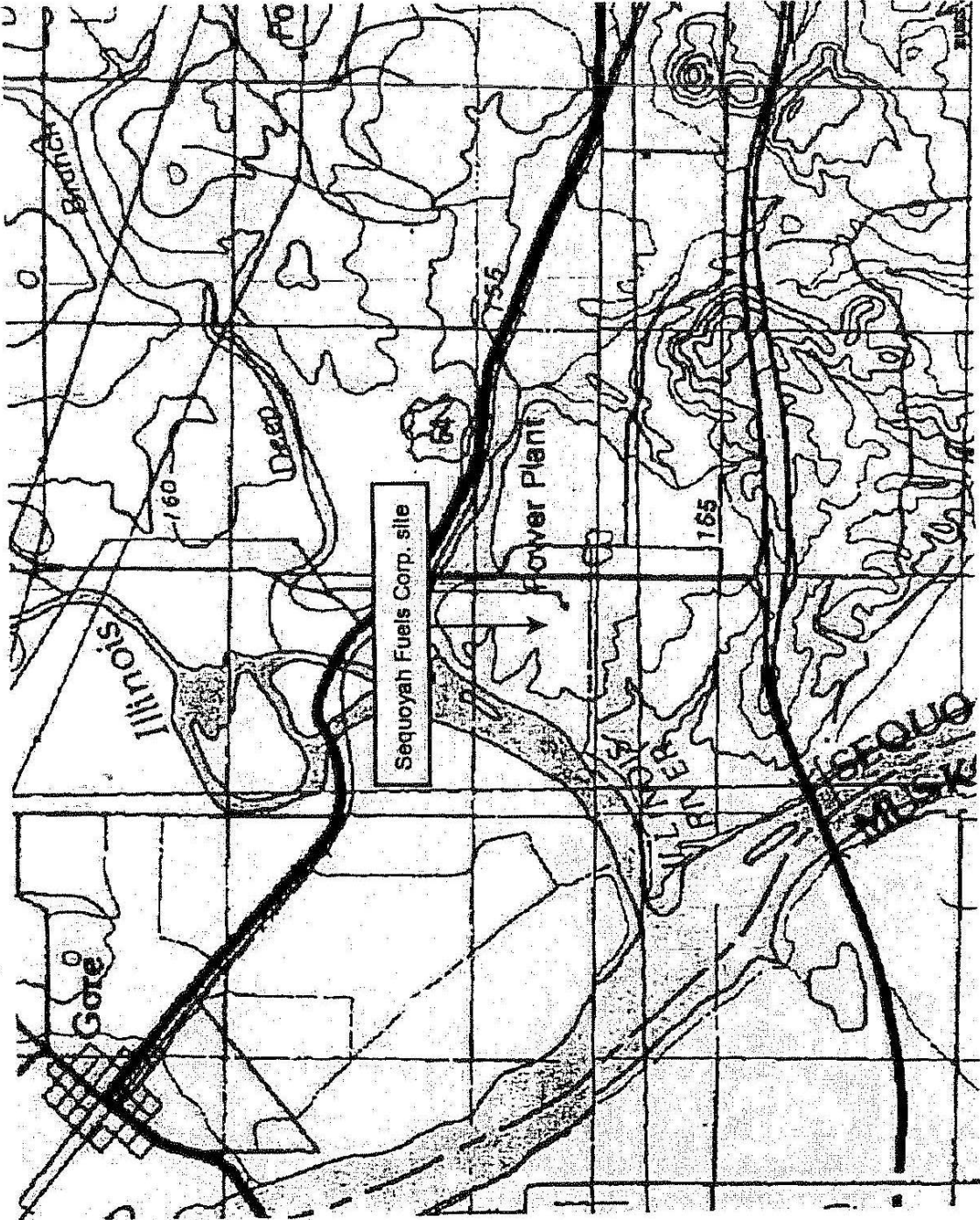


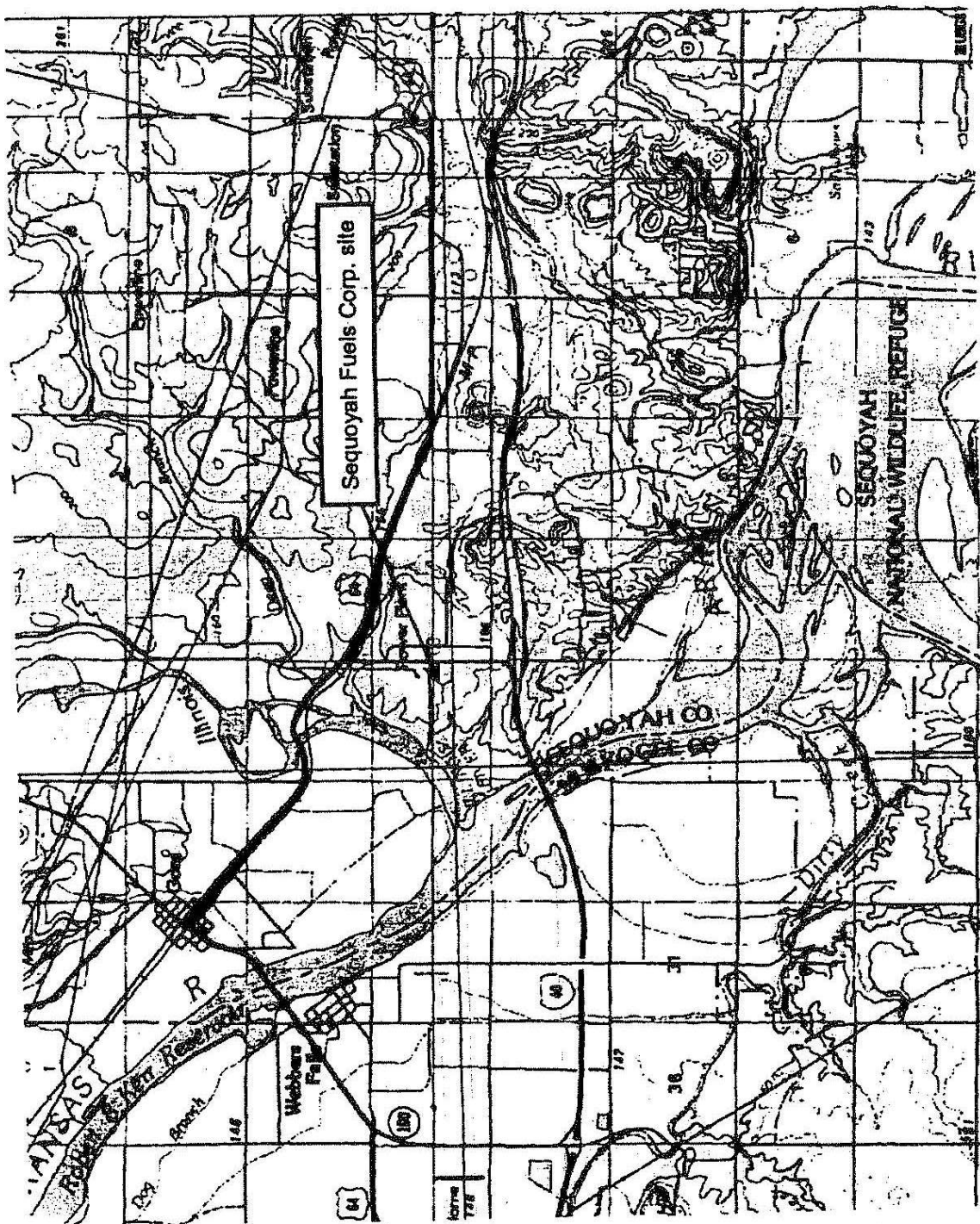
**Enclosure 1**

**Maps of Sequoyah Fuels Corporation Site and Vicinity**









Enclosure 2

June 20, 2000 Letter from Robert L. Brooks, Oklahoma State Archeologist  
to Thomas Essig, NRC





## Oklahoma Archeological Survey

THE UNIVERSITY OF OKLAHOMA

June 20, 2000

Thomas H. Essig, Chief  
Environmental & Performance Assessment Branch  
Division of Waste Management  
Office of Nuclear Material Safety and Safeguards  
Nuclear Energy Regulatory Commission  
Washington, DC 20555-0001

Re: Proposed decommissioning of the Sequoyah Fuels Corporation Facility near  
Gore. Legal Description: Section 21 T12N R21E, Sequoyah County,  
Oklahoma.

Dear Mr. Essig:

I have completed an evaluation of the above referenced undertaking. A review of the site files maintained by this agency revealed that there is one previously recorded archaeological site near the plant site. This is 34SQ25, the Cemetery Site, located in the NW1/4 SW1/4 SW1/4 of Section 21. SQ25 is reportedly just west of the Sequoyah Fuels Plant fence on Corps of Engineers property. The Cemetery site contains prehistoric as well as probable historic Cherokee materials and has potential eligibility to the National Register. Based on the location of the site, it is unlikely that contamination has affected the site. The area where contamination hazards may be higher - in the northeastern and northern portion of Section 21, we have no information pertaining to the existence of archaeological resources. Furthermore, the extensive disturbance of the processing area makes it unlikely that undisturbed resources would be present.

I have no objection to decommissioning of the Sequoyah Fuels Plant. However, consultation should also be accomplished with the various indigenous and removal tribes that hold an interest with these lands. This review has been conducted in cooperation with the State Historic Preservation Office, Oklahoma Historical Society.

Sincerely,

Robert L. Brooks  
State Archaeologist

Cc: SHPO

**Enclosure 3**

**June 27, 2000 Letter from Meleva Heisch, Deputy State Historic Preservation Officer  
to Thomas Essig, NRC**





## Oklahoma Historical Society

Founded May 27, 1893

State Historic Preservation Office • 2704 Villa Prom • Shepherd Mall • Oklahoma City, OK 73107-2441  
Telephone 405/521-6248 • Fax 405/947-2918

June 27, 2000

Mr. Thomas Essig, Chief  
Uranium Recovery/Waste Branch  
Division of Waste Management  
Office of Nuclear Material Safety  
U.S. NUCLEAR REGULATORY COMMISSION  
Washington, D.C. 20555-0001

RE: File #1933-00; Sequoyah Fuels Corp. Proposed Decommission Project  
near Cofer, Oklahoma -

Dear Mr. Essig:

We have received and reviewed the documentation submitted on the referenced project in Sequoyah County. Additionally, we have examined the information contained in the Oklahoma Landmarks Inventory (OLI) files and other materials on historic resources available in our office.

In addition to our review, you must contact the Oklahoma Archeological Survey (OAS), 111 East Chesapeake, Room #102, Norman, OK 73019-5111 (#405/325-7211), to obtain a determination about the presence of pre-historic resources that may be eligible for the National Register of Historic Places. Should the OAS conclude that there are no archaeological sites or other types of historic properties, as defined in 36 CFR Part 800.16(1), which are eligible for inclusion in the National Register of Historic Places within the project area and that such sites are unlikely to occur, we find that there are no historic properties affected within the referenced project's area of potential effect.

The OAS may conclude that an on-site investigation of all or part of the project impact area is necessary to determine the presence of archaeological resources. In the event that such an investigation reveals the presence of archaeological sites, we will defer to the judgment of the OAS concerning whether or not any of the resources should be considered "historic properties" under the Section 106 review process.

Should further correspondence pertaining to this project be necessary, the above underlined file number must be referenced. If you have any questions, please contact Mr. Marshall Gettys, Historical Archaeologist, at 405/521-6381. Thank you.

Sincerely,

Melvena Heisch  
Deputy State Historic  
Preservation Officer

MH:pm

Enclosure 4

August 31, 2001 Letter from David Comingdeer Rabon, Cherokee Nation  
to Phyllis Sobel, NRC



## CHEROKEE NATION

P.O. Box 948  
Tahlequah, OK 74465-0948  
918-456-0671

40-2027  
Chad "Cornassel" Smith  
ᏆᏍᏁᏍᏁ  
Principal Chief

Hastings Shade  
ᏆᏍᏁᏍᏁ  
Deputy Principal Chief

August 29, 2001

Phyllis Sobel, PH. D.  
Project Manager  
US Nuclear Regulatory Commission  
Washington, DC 20555

Re: The proposed decommissioning of Sequoyah Fuels Site in Sequoyah County, OK

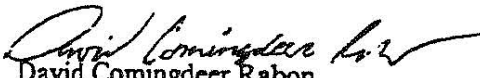
Dear Ms. Sobel,

The Cherokee Nation does not object to your proposed project. We are unaware of any significant historic or pre-historic sites in your project area. However, Native American human remains and associated funerary items may exist in the area, as well as isolated archaeological sites.

Please contact this office if buried archaeological materials such as chipped stone tools, pottery, bone, historic crockery, glass, metal items, or building materials are inadvertently discovered during decommissioning of the site.

If you have any further questions or concerns, please feel free to contact me at the number below.

Wa-do,

  
David Comingdeer Rabon  
Historic Preservation Specialist  
Department of Natural Resources  
Phone: (918) 456-0671 ext. 2631  
Fax: (918) 458-7673

NMSSO Public

Rec'd from  
NMSS  
12/31/01



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

November 27, 2006

Data Coordinator  
Oklahoma Natural Heritage Inventory  
Oklahoma Biological Survey  
111 East Chesapeake Street  
Norman, Oklahoma 73019-0575

SUBJECT: SPECIES OCCURRENCES FOR SEQUOYAH FUELS CORPORATION'S  
GORE, OKLAHOMA SITE

Dear Sir or Madam:

By letter dated January 28, 2003, Sequoyah Fuels Corporation (SFC) submitted to the U.S. Nuclear Regulatory Commission (NRC), a proposed reclamation plan for its facility in Gore, OK. SFC has revised this proposed reclamation plan several times in response to questions raised by the NRC staff. The NRC staff is preparing an Environmental Impact Statement (EIS) to document its evaluation of the potential environmental impacts from SFC's proposed plan and alternatives to that plan. The EIS is being prepared in accordance with the requirements of the National Environmental Policy Act of 1969, as amended, as specified in 10 CFR Part 51 of the NRC's regulations. In conjunction with its review, the NRC staff also is considering the potential impact of the proposed plan on endangered and threatened species or on critical habitat within the area of influence for the proposed action, in accordance with the Endangered Species Act.

The SFC site is located near the confluence of the Arkansas and Illinois Rivers, 2.5 miles east of Gore, Oklahoma, and 25 miles southeast of Muskogee. The SFC site is on the east bank of a tributary of the Illinois River, the headwaters of the Robert S. Kerr Reservoir. SFC is proposing to reclaim radioactive wastes produced by past site operations and to remediate buildings, site soils, and groundwater impacted by those operations. SFC would construct an engineered onsite disposal cell to contain these wastes and impacted structures and soils, with materials used for cell construction obtained from onsite sources or from nearby quarries. Following reclamation, disturbed areas would be re-graded and re-vegetated. Maps of the site and vicinity are enclosed (Enclosure 1). Orthophotographs of the site and vicinity are provided in Enclosure 2. The site is located in the southeastern corner of the Gore quadrangle (scale 1:24,000).

By this letter, the NRC staff is requesting the locations of species occurrences for the SFC site. This information will be used in assessing the potential impact to rare, endangered, and threatened species from SFC's proposed reclamation activities.

If you have any questions concerning this matter, please contact Mr. James Park of my staff. Mr. Park can be reached by phone at (301) 415-5835 or by email at [jrp@nrc.gov](mailto:jrp@nrc.gov).

Sincerely,



B. Jennifer Davis, Chief  
Environmental Review Section  
Division of Waste Management  
and Environmental Protection  
Office of Federal and State Materials  
and Environmental Management Programs

Docket No. 40-8027

License No. SUB-1010

Enclosures:

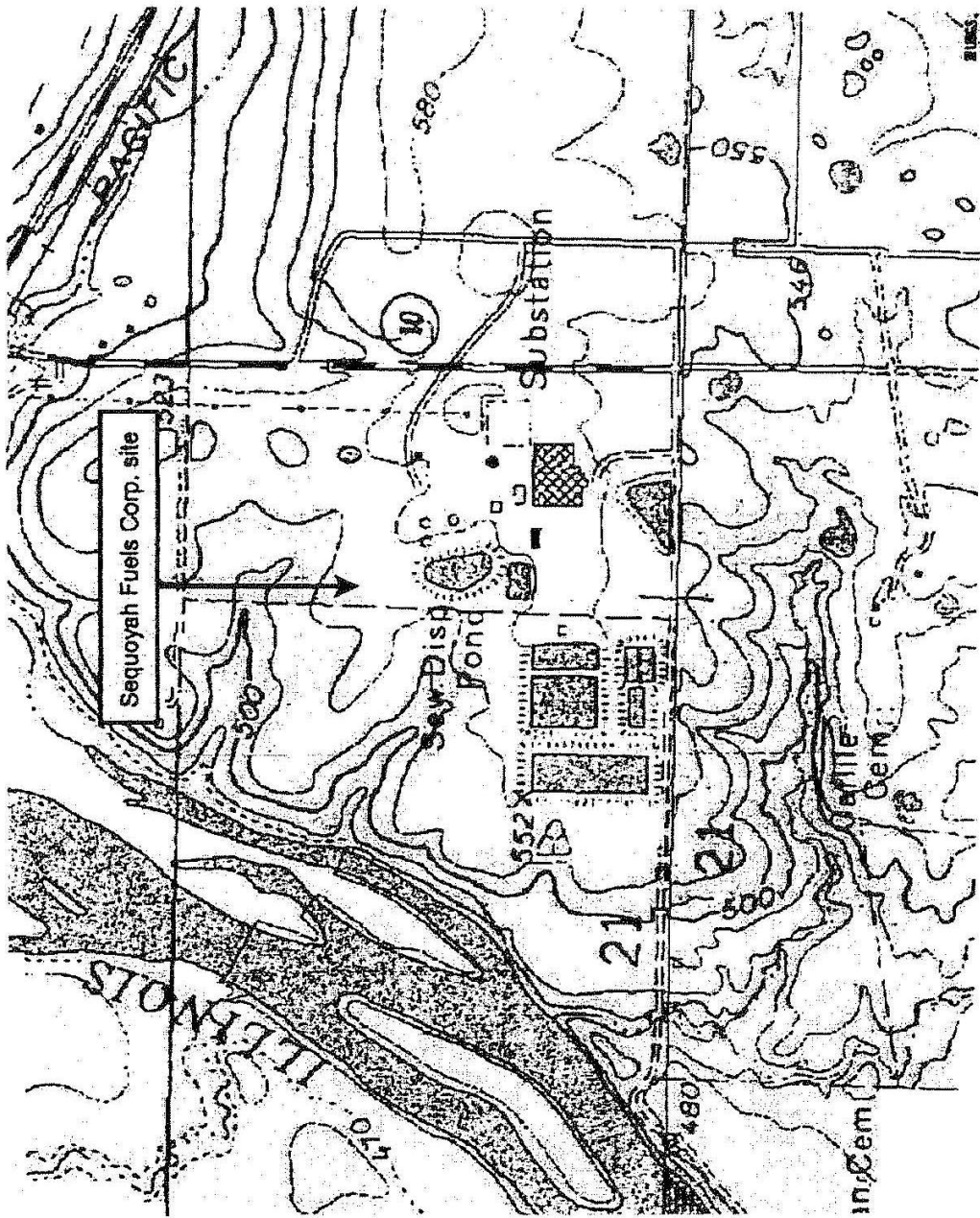
1. Maps
2. Orthophotographs

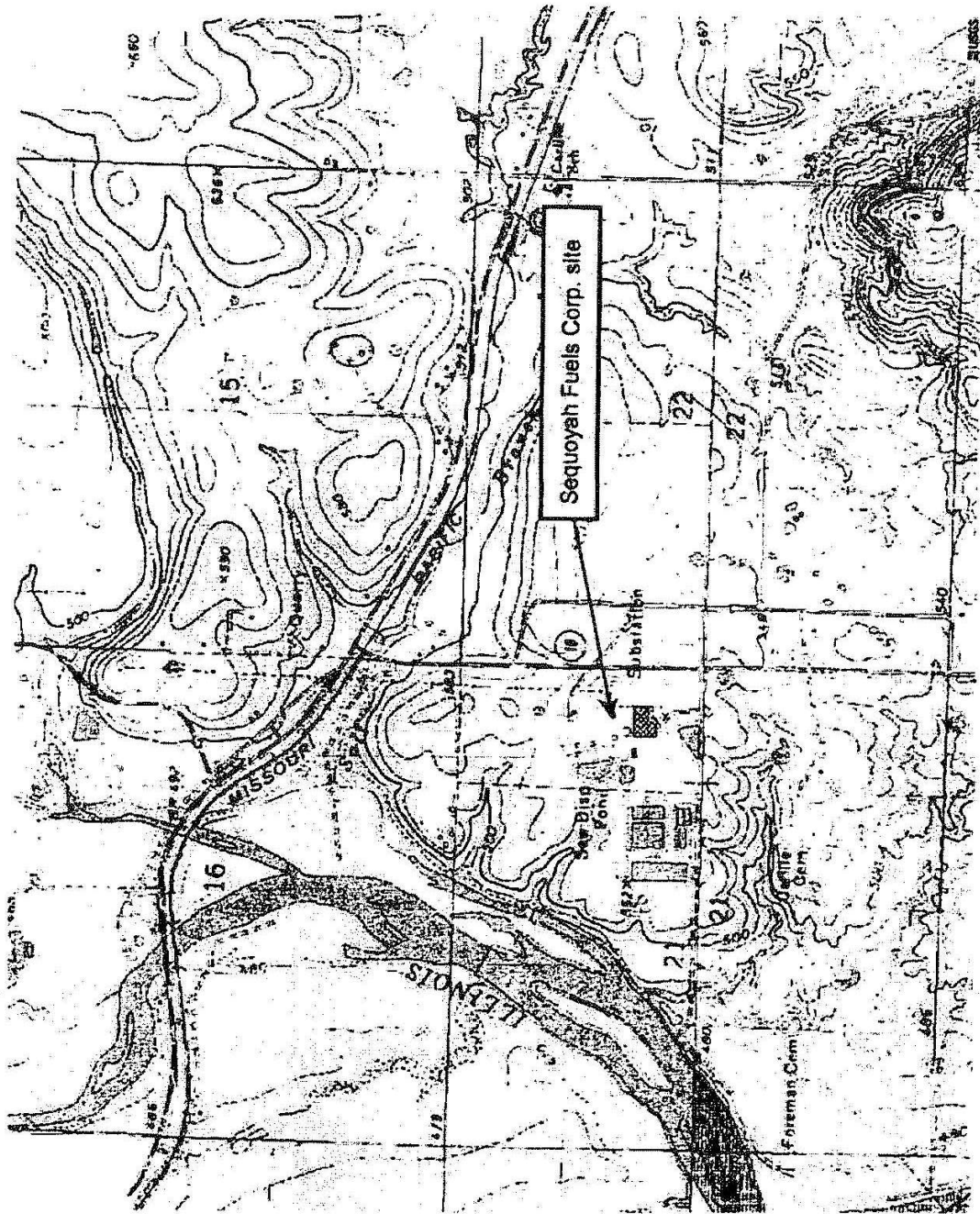
cc:

Craig Harlin, SFC

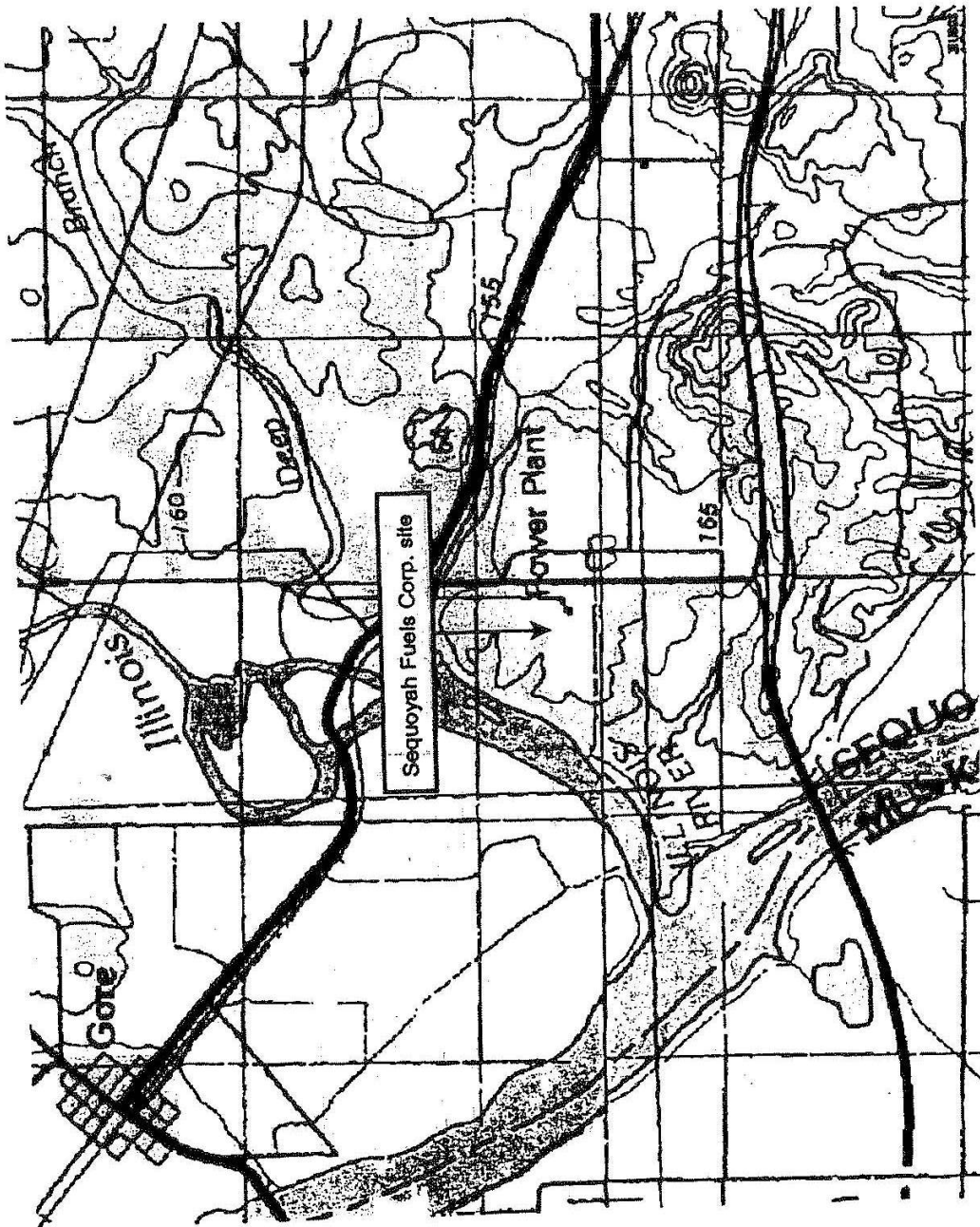
**Enclosure 1**

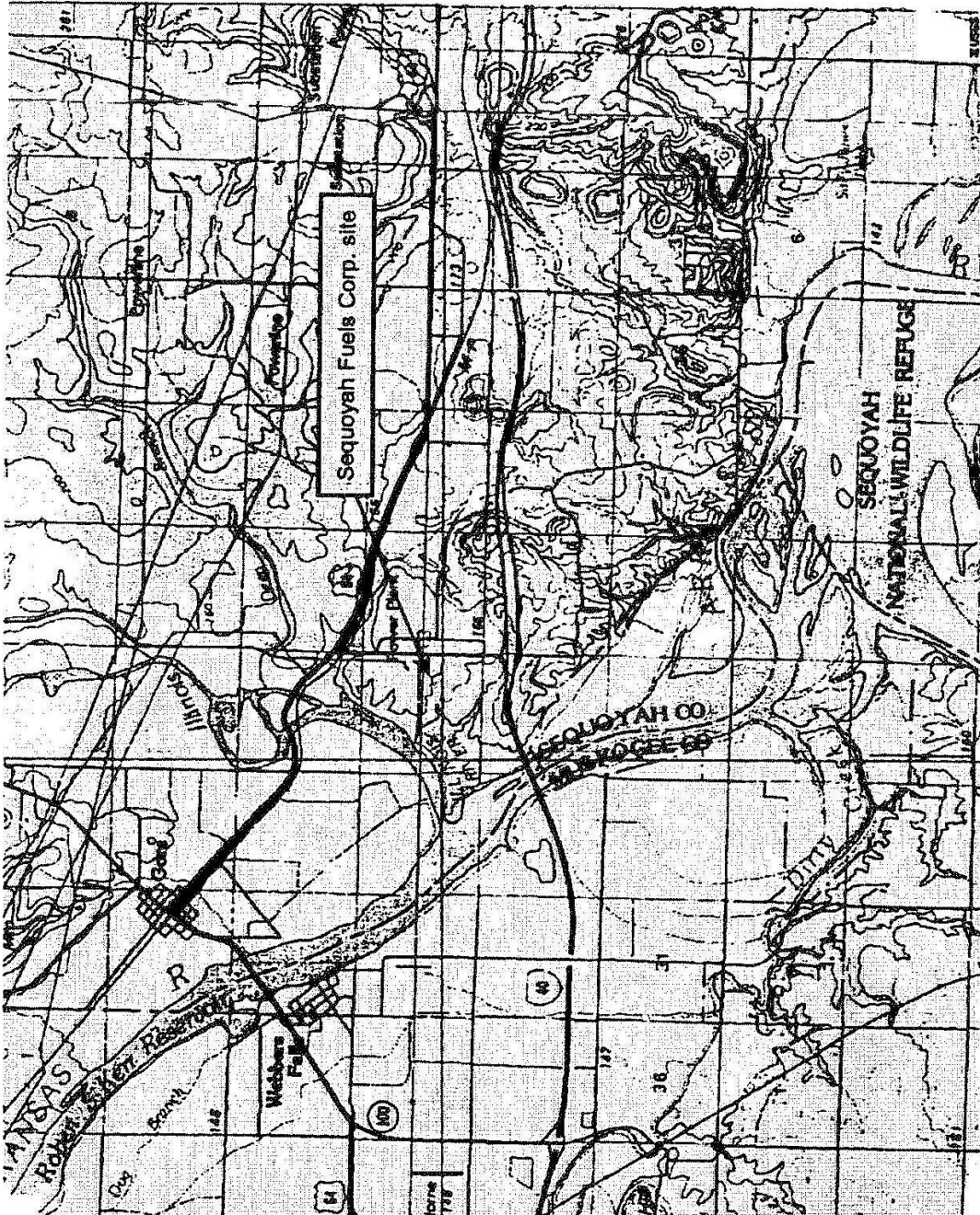
**Maps of Sequoyah Fuels Corporation Site and Vicinity**











Enclosure 2

Orthophotographs of Sequoyah Fuels Corporation Site and Vicinity



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

November 28, 2006

Mr. Jerry Brabander, Field Supervisor  
U.S. Fish & Wildlife Service  
Oklahoma Ecological Services Field Office  
9014 E. 21<sup>st</sup> Street  
Tulsa, Oklahoma 74129

**SUBJECT: CONCURRENCE WITH DETERMINATION OF NO ADVERSE AFFECT ON LISTED OR PROPOSED SPECIES OR CRITICAL HABITAT FOR PROPOSED RECLAMATION OF SEQUOYAH FUELS CORPORATION'S GORE, OKLAHOMA SITE**

Dear Mr. Brabander:

By letter dated January 28, 2003, Sequoyah Fuels Corporation (SFC) submitted to the U.S. Nuclear Regulatory Commission (NRC), a proposed reclamation plan for its facility in Gore, OK. SFC has revised this proposed reclamation plan several times in response to questions raised by the NRC staff. The NRC staff is preparing an Environmental Impact Statement (EIS) to document its evaluation of the potential environmental impacts from SFC's proposed plan and alternatives to that plan. The EIS is being prepared in accordance with the requirements of the National Environmental Policy Act of 1969, as amended, as specified in 10 CFR Part 51 of the NRC's regulations. In conjunction with its review, the NRC staff also is considering the potential impact of the proposed plan on endangered and threatened species or on critical habitat within the area of influence for the proposed action, in accordance with the Endangered Species Act.

The SFC site is located near the confluence of the Arkansas and Illinois Rivers, 2.5 miles east of Gore, Oklahoma, and 25 miles southeast of Muskogee. The SFC site is on the east bank of a tributary of the Illinois River, the headwaters of the Robert S. Kerr Reservoir. SFC is proposing to reclaim radioactive wastes produced by past site operations and to remediate buildings, site soils, and groundwater impacted by those operations. SFC would construct an engineered onsite disposal cell to contain these wastes and impacted structures and soils, with materials used for cell construction obtained from onsite sources or from nearby quarries. Following reclamation, disturbed areas would be re-graded and re-vegetated. Maps of the site and vicinity are enclosed (Enclosure 1). Orthophotographs of the site and vicinity are provided in Enclosure 2.

Based on information obtained from your office's website ([www.fws.gov/itw2es/Oklahoma](http://www.fws.gov/itw2es/Oklahoma)), the American burying beetle, the Indiana bat, the interior least tern, the Ozark big-eared bat, the bald eagle, and the piping plover are the Federally-listed endangered and threatened species in Sequoyah County, OK. Based on species-specific information gathered from your office's website, it does not appear likely that the American burying beetle, the Indiana bat, or the Ozark big-eared bat are present on the SFC site or in its vicinity. From sighting lists on the website ([www.fws.gov/southwest/refuges/oklahoma/sequoyah/index.html](http://www.fws.gov/southwest/refuges/oklahoma/sequoyah/index.html)) for the Sequoyah National

J. Brabander

2

Wildlife Refuge, the interior least tern is commonly seen in the summer and the bald eagle commonly observed in the fall and winter, while the piping plover is only rare sighted.

Because SFC's proposed reclamation and remediation activities would be conducted within its site boundaries, the NRC staff considers that these activities would not adversely affect endangered and threatened species or critical habitat within the area of influence for the proposed action. Therefore, the NRC staff hereby informs your office of this determination and considers that consultation under Section 7 of the Endangered Species Act is not required.

If you have any questions concerning this matter, please contact Mr. James Park of my staff. Mr. Park can be reached by phone at (301) 415-5835 or by e-mail at jrp@nrc.gov.

Sincerely,



B. Jennifer Davis, Chief  
Environmental Review Section  
Division of Waste Management  
and Environmental Protection  
Office of Federal and State Materials  
and Environmental Management Programs

Docket No: 40-8027  
License No: SUB-1010

Enclosures:

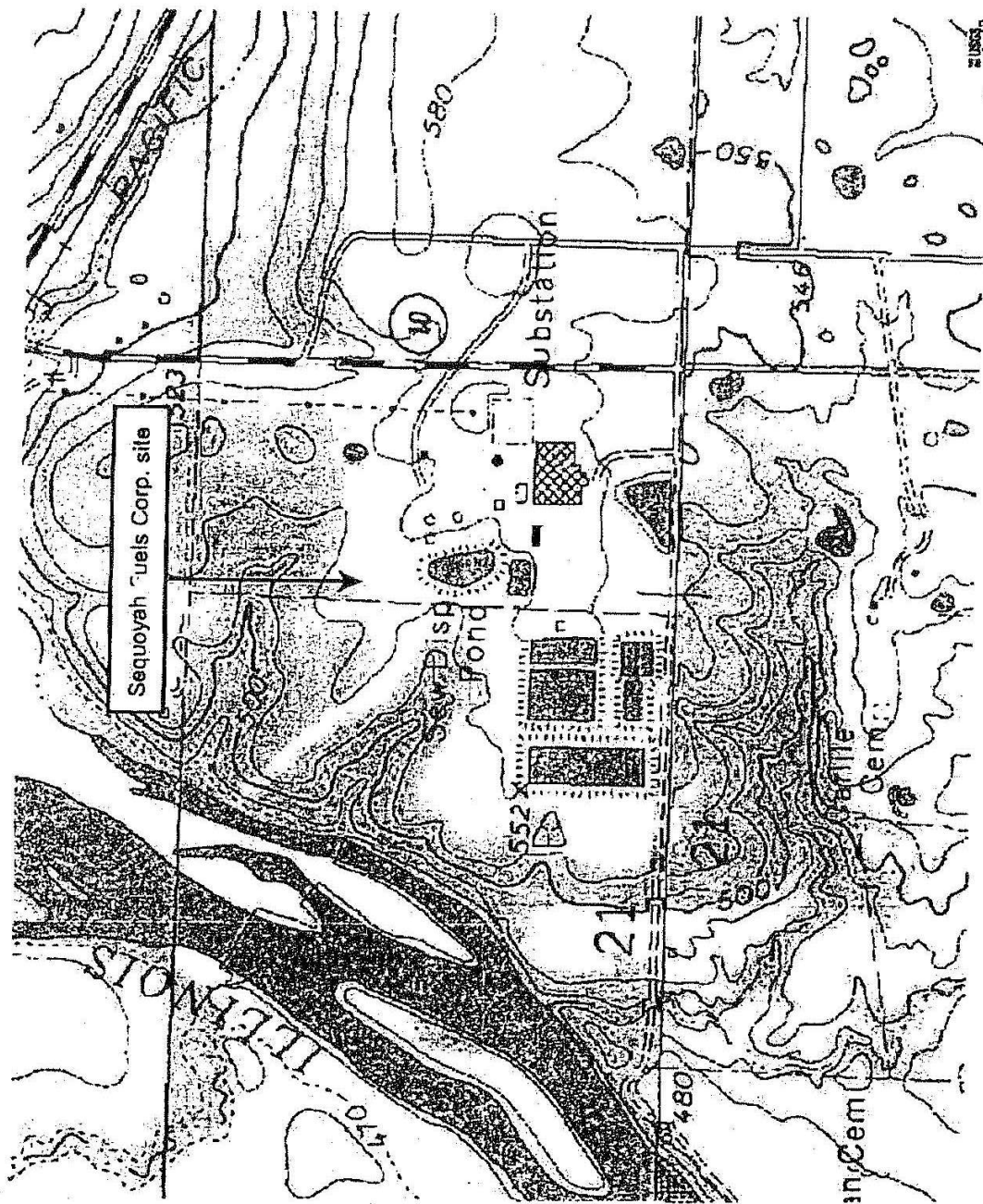
1. Maps
2. Orthophotographs

cc:

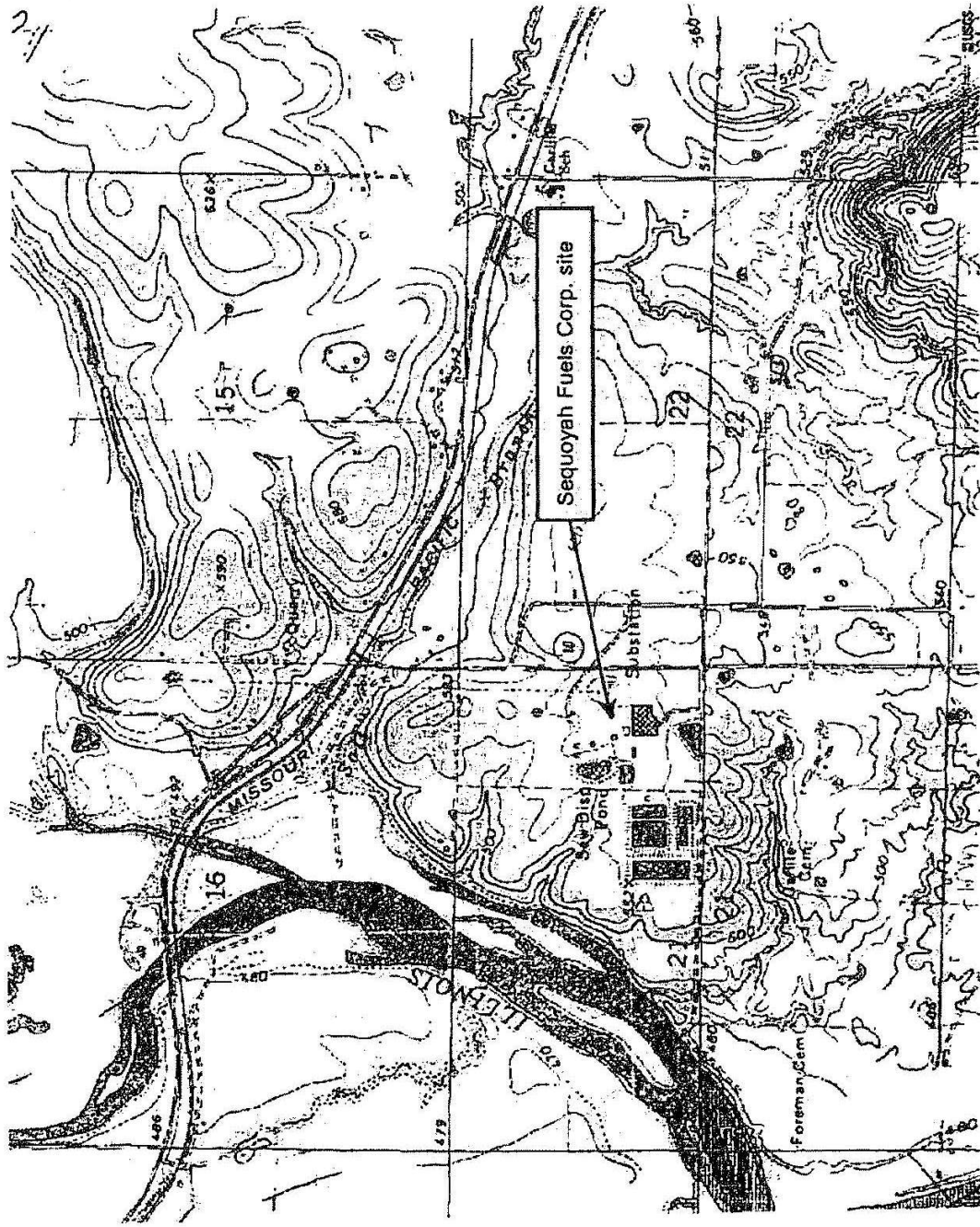
Craig Harlin, SFC  
Robert Brooks, OK Archeological Survey  
Jeannine Hale, Esq., Cherokee Nation

**Enclosure 1**

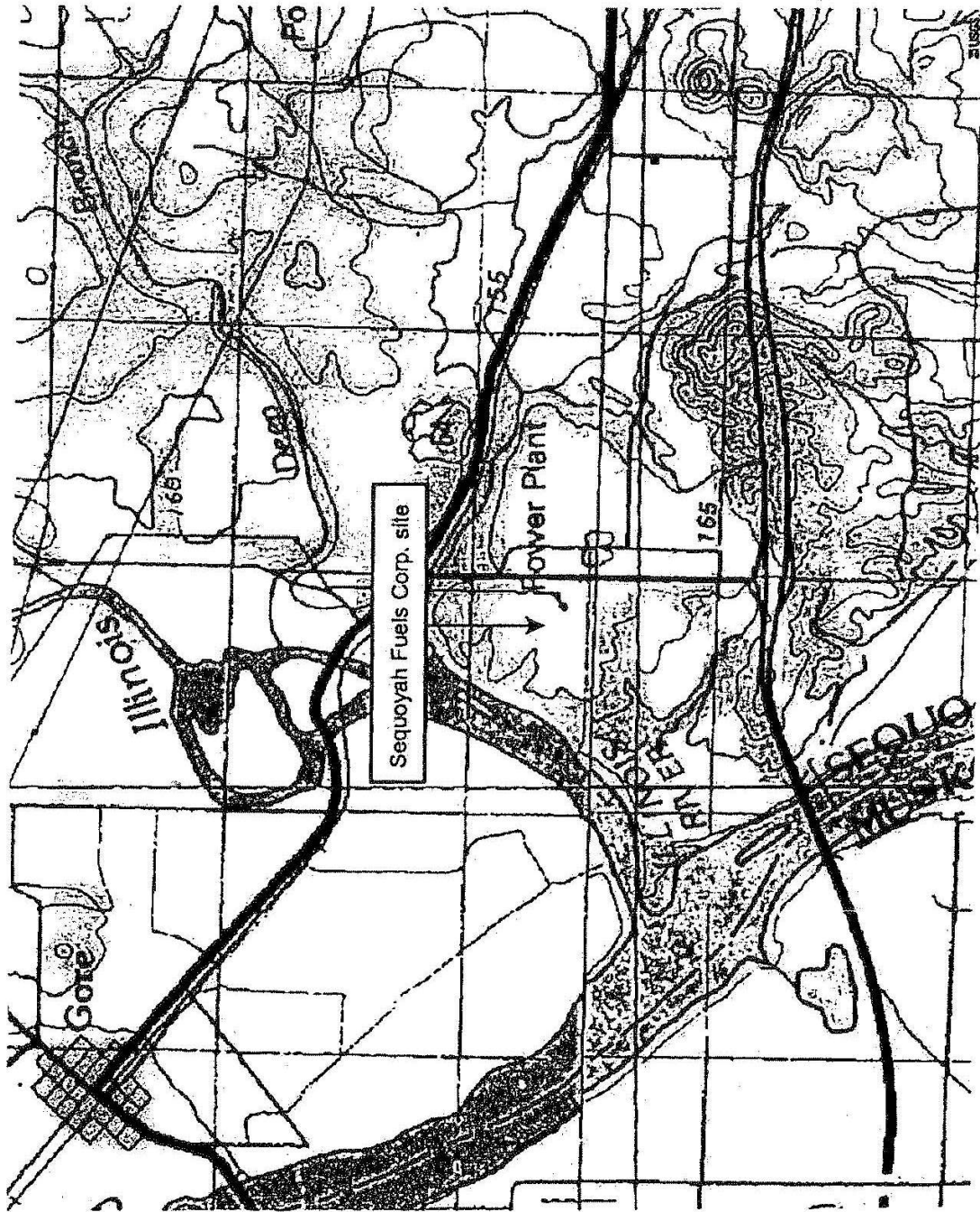
**Maps of Sequoyah Fuels Corporation Site and Vicinity**













**Enclosure 2**

**Orthophotographs of Sequoyah Fuels Corporation Site and Vicinity**



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

November 28, 2006

Ms. Melvena Heisch  
Deputy State Historic Preservation Officer  
State Historic Preservation Office  
Oklahoma Historical Society  
Oklahoma History Center  
2401 N. Laird Avenue  
Oklahoma City, OK 73105-7914

SUBJECT RE-INITIATION OF SECTION 106 PROCESS FOR PROPOSED  
RECLAMATION OF SEQUOYAH FUELS CORPORATION'S SITE IN  
GORE, OKLAHOMA

Dear Ms. Heisch:

By letter dated January 28, 2003, Sequoyah Fuels Corporation (SFC) submitted to the U.S. Nuclear Regulatory Commission (NRC), a proposed reclamation plan for its facility in Gore, OK. SFC has revised this proposed reclamation plan several times in response to questions raised by the NRC staff. The NRC staff is preparing an Environmental Impact Statement (EIS) to document its evaluation of the potential environmental impacts from SFC's proposed plan and alternatives to that plan. The EIS is being prepared in accordance with the requirements of the National Environmental Policy Act of 1969, as amended, as specified in 10 CFR Part 51 of the NRC's regulations. As part of its environmental review, the NRC staff is also considering the potential impact of the proposed plan on historic and cultural resources in accordance with the National Historic Preservation Act.

In accordance with 36 CFR 800.4(a)(1), for any undertaking that may adversely affect historic properties, the "area of potential effects" (APE) must first be determined and documented. The present undertaking is the proposed reclamation of wastes produced by past site operations and of site soils and groundwater impacted by those operations. SFC is proposing to construct an onsite disposal cell to contain these wastes and impacted soils. Materials used for cell construction would be obtained from onsite sources or from nearby quarries. Maps of the site and vicinity are enclosed (Enclosure 1). Based on SFC's proposed reclamation activities, the NRC staff has determined that the APE is defined by the boundaries of the SFC site.

In the past, the NRC staff has consulted with your office regarding SFC's proposed decommissioning and reclamation of its site. Enclosed are responses from you (June 27, 2000), the State Archaeologist (June 20, 2000), and the Cherokee Nation (August 29, 2001) regarding that proposed project (Enclosures 2-4). The letters stated that there were no historic properties that would be affected by site reclamation. SFC's current proposed reclamation activities are similar in scope and extent to those evaluated in these earlier consultation letters.

Based on its evaluation, the NRC staff has determined that SFC's proposed reclamation of its Gore, OK site does not adversely affect any historical or cultural properties. The staff's determination is based on the lack of listed historic properties and identified cultural resources within the APE and the scope and extent of SFC's proposed reclamation activities. Therefore, the NRC staff requests your concurrence with this determination that the proposed action does not adversely affect any historical properties.

If you have any questions, please contact Mr. James Park of my staff. Mr. Park can be reached at 301-415-5835 or by email to jrp@nrc.gov.

Sincerely,



B. Jennifer Davis, Chief  
Environmental Review Section  
Division of Waste Management  
and Environmental Protection  
Office of Federal and State Materials  
and Environmental Management Programs

Docket No. 40-8027  
License No. SUB-1010

Enclosures:

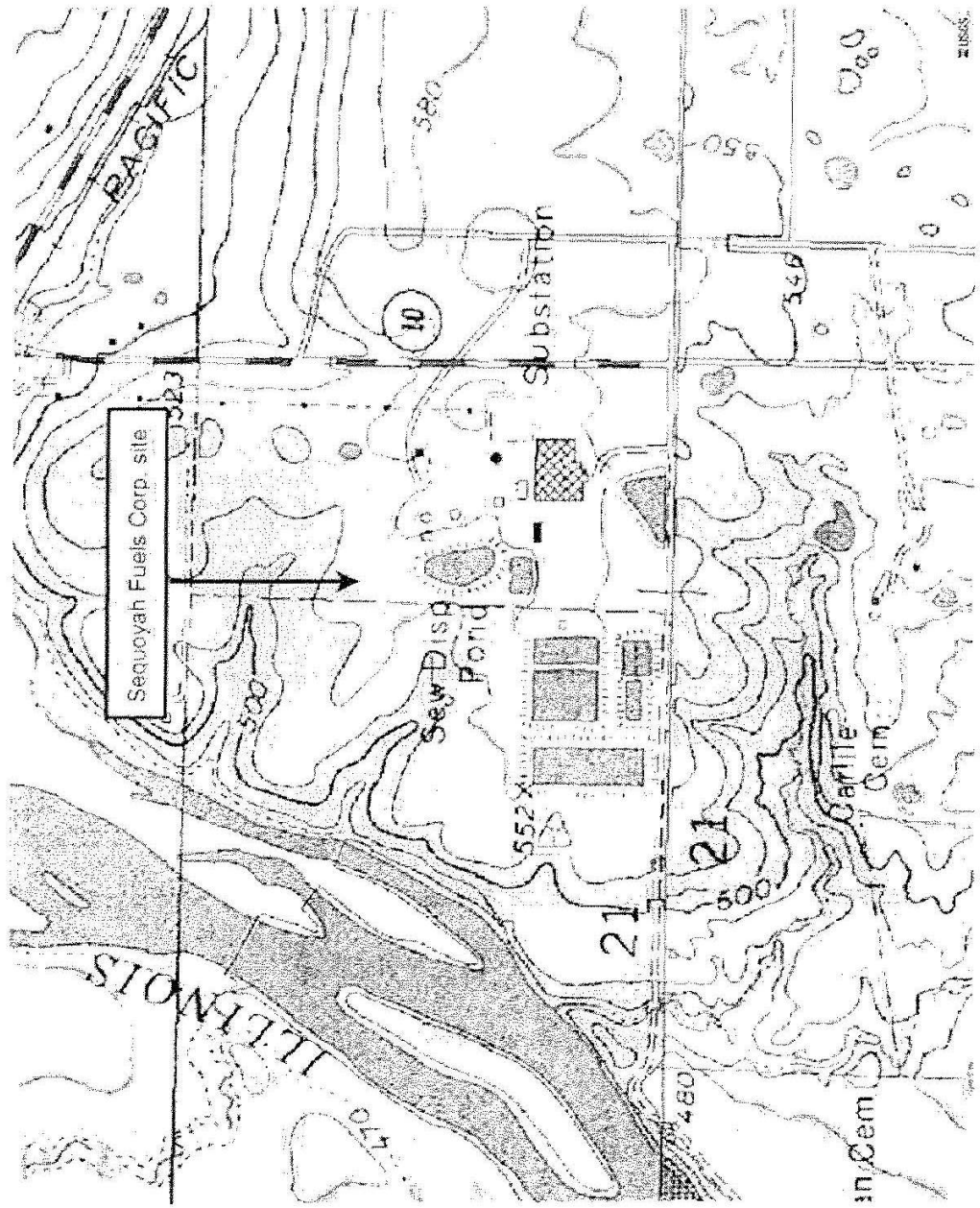
1. Maps of the Site and Vicinity
2. Oklahoma Historical Society
3. Oklahoma Archaeological Survey Report
4. Proposed Decommissioning of Sequoyah Fuels

cc:

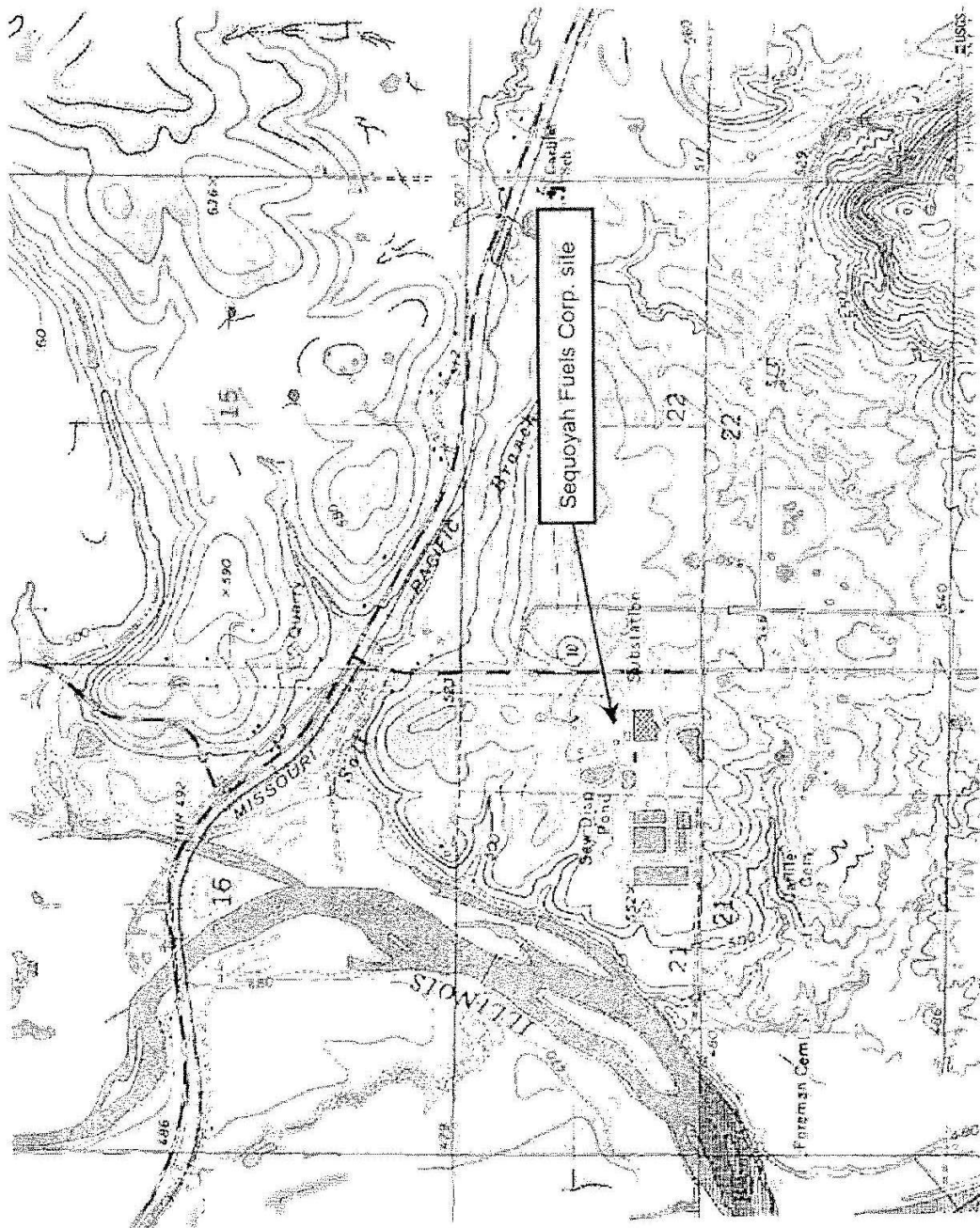
Craig Harlin, SFC  
Robert Brooks, OK Archeological Survey  
Jeannine Hale, Esq., Cherokee Nation

Enclosure 1

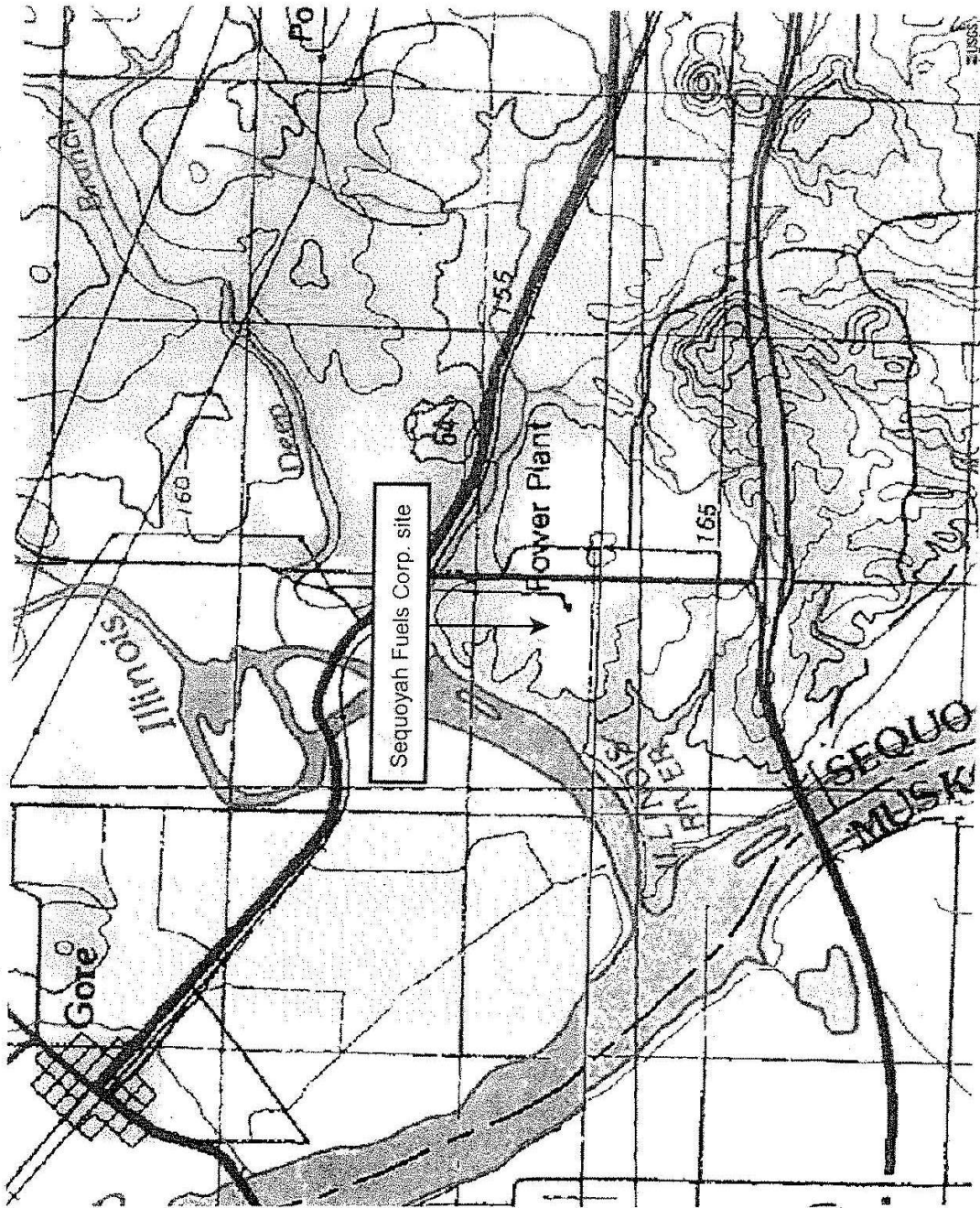
Maps of Sequoyah Fuels Corporation Site and Vicinity

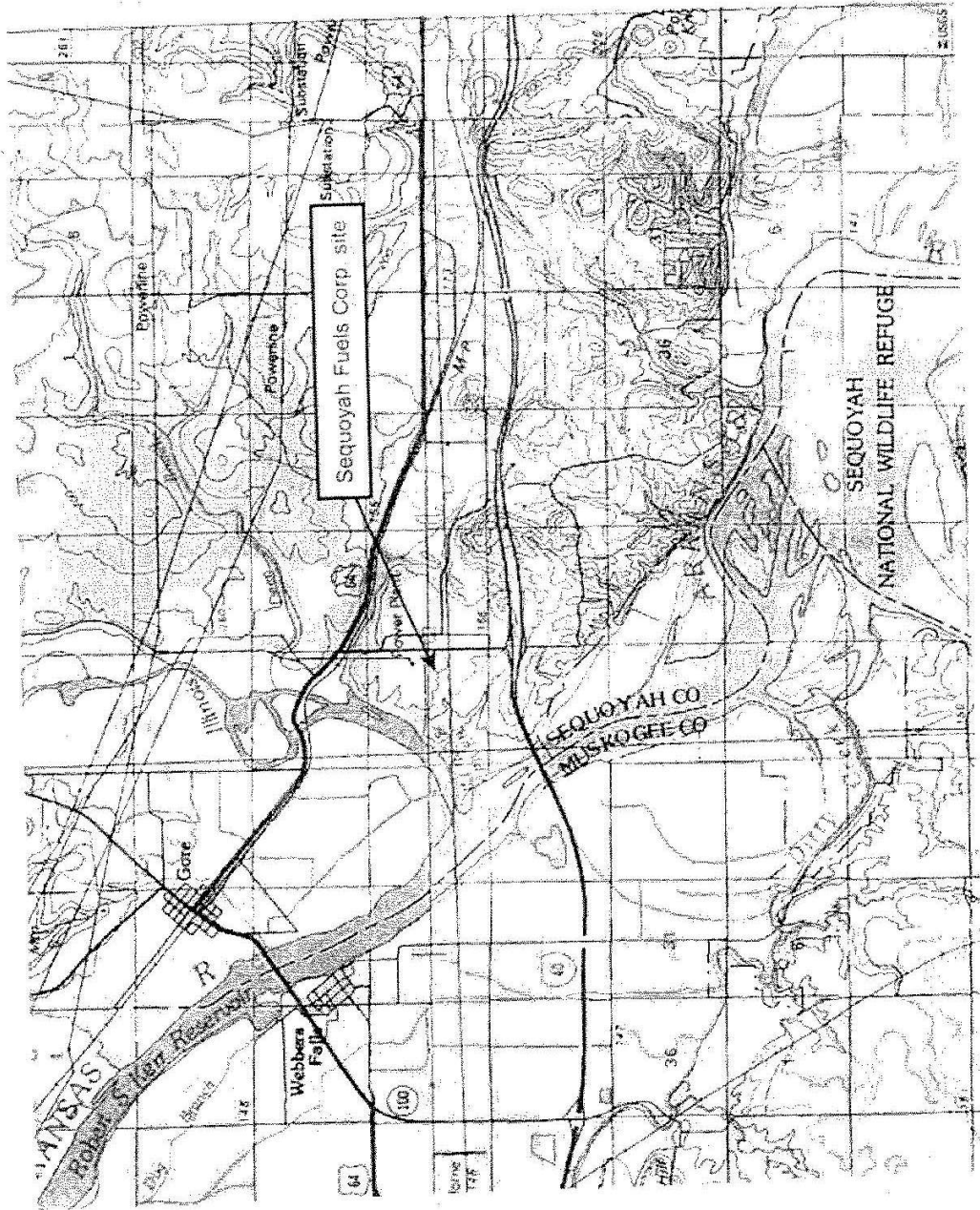












Enclosure 2

June 27, 2000 Letter from Meleva Heisch, Deputy State Historic Preservation Officer  
to Thomas Essig, NRC



# Oklahoma Historical Society

Founded May 27, 1893

State Historic Preservation Office • 2704 Villa Prom • Shepherd Mall • Oklahoma City, OK 73107-2441  
Telephone 405/521-6249 • Fax 405/947-2918

June 27, 2000

Mr. Thomas Essig, Chief  
Uranium Recovery/Waste Branch  
Division of Waste Management  
Office of Nuclear Material Safety  
U.S. NUCLEAR REGULATORY COMMISSION  
Washington, D.C. 20555-0001

RE: File #1933-00; Sequoyah Fuels Corp. Proposed Decommission Project  
near Cofoe, Oklahoma

Dear Mr. Essig:

We have received and reviewed the documentation submitted on the referenced project in Sequoyah County. Additionally, we have examined the information contained in the Oklahoma Landmarks Inventory (OLI) files and other materials on historic resources available in our office.

In addition to our review, you must contact the Oklahoma Archeological Survey (OAS), 111 East Chesapeake, Room #102, Norman, OK 73019-5111 (#405/325-7211), to obtain a determination about the presence of pre-historic resources that may be eligible for the National Register of Historic Places. Should the OAS conclude that there are no archaeological sites or other types of historic properties, as defined in 36 CFR Part 800.16(1), which are eligible for inclusion in the National Register of Historic Places within the project area and that such sites are unlikely to occur, we find that there are no historic properties affected within the referenced project's area of potential effect.

The OAS may conclude that an on-site investigation of all or part of the project impact area is necessary to determine the presence of archaeological resources. In the event that such an investigation reveals the presence of archaeological sites, we will defer to the judgment of the OAS concerning whether or not any of the resources should be considered "historic properties" under the Section 106 review process.

Should further correspondence pertaining to this project be necessary the above underlined file number must be referenced. If you have any questions, please contact Mr. Marshall Gettys, Historical Archaeologist, at 405/521-6381. Thank you.

Sincerely,

Melvena Heisch  
Deputy State Historic  
Preservation Officer

MH:pm

Enclosure 3

June 20, 2000 Letter from Robert L. Brooks, Oklahoma State Archeologist  
to Thomas Essig, NRC



## Oklahoma Archeological Survey

THE UNIVERSITY OF OKLAHOMA

June 20, 2000

Thomas H. Essig, Chief  
Environmental & Performance Assessment Branch  
Division of Waste Management  
Office of Nuclear Material Safety and Safeguards  
Nuclear Energy Regulatory Commission  
Washington, DC 20555-0001

Re: Proposed decommissioning of the Sequoyah Fuels Corporation Facility near  
Gore. Legal Description: Section 21 T12N R21E, Sequoyah County,  
Oklahoma.

Dear Mr. Essig:

I have completed an evaluation of the above referenced undertaking. A review of the site files maintained by this agency revealed that there is one previously recorded archaeological site near the plant site. This is 34SQ25, the Cemetery Site, located in the NW1/4 SW1/4 SW1/4 of Section 21. SQ25 is reportedly just west of the Sequoyah Fuels Plant fence on Corps of Engineers property. The Cemetery site contains prehistoric as well as probable historic Cherokee materials and has potential eligibility to the National Register. Based on the location of the site, it is unlikely that contamination has affected the site. The area where contamination hazards may be higher - in the northeastern and northern portion of Section 21, we have no information pertaining to the existence of archaeological resources. Furthermore, the extensive disturbance of the processing area makes it unlikely that undisturbed resources would be present.

I have no objection to decommissioning of the Sequoyah Fuels Plant. However, consultation should also be accomplished with the various indigenous and removal tribes that hold an interest with these lands. This review has been conducted in cooperation with the State Historic Preservation Office, Oklahoma Historical Society.

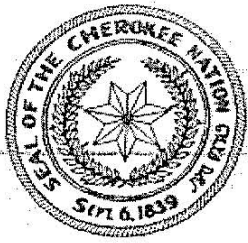
Sincerely,

Robert L. Brooks  
State Archaeologist

Cc: SHPO

Enclosure 4

August 31, 2001 Letter from David Comingdeer Rabon, Cherokee Nation  
to Phyllis Sobel, NRC



## CHEROKEE NATION

P.O. Box 948

Tahlequah, OK 74465-0948

918-456-0671

490-2007  
Chad "Cornassel" Smith

Principal Chief

Hastings Shade

Deputy Principal Chief

August 29, 2001

Phyllis Sobel, PH. D.  
Project Manager  
US Nuclear Regulatory Commission  
Washington, DC 20555

Re: The proposed decommissioning of Sequoyah Fuels Site in Sequoyah County, OK

Dear Ms. Sobel,

The Cherokee Nation does not object to your proposed project. We are unaware of any significant historic or pre-historic sites in your project area. However, Native American human remains and associated funerary items may exist in the area, as well as isolated archaeological sites.

Please contact this office if buried archaeological materials such as chipped stone tools, pottery, bone, historic crockery, glass, metal items, or building materials are inadvertently discovered during decommissioning of the site.

If you have any further questions or concerns, please feel free to contact me at the number below.

Wa-do,

David Comingdeer Rabon  
Historic Preservation Specialist  
Department of Natural Resources  
Phone: (918) 456-0671 ext. 2631  
Fax: (918) 458-7673

NMSSOIPublic

Rec'd from  
NMSS  
12/31/01





UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

November 30, 2006

Greg Duffy, Director  
Oklahoma Department of Wildlife Conservation  
P.O. Box 53465  
Oklahoma City, Oklahoma 73152-3465

**SUBJECT: CONCURRENCE WITH DETERMINATION OF NO ADVERSE AFFECT ON LISTED OR PROPOSED SPECIES OR CRITICAL HABITAT FOR PROPOSED RECLAMATION OF SEQUOYAH FUELS CORPORATION'S GORE, OKLAHOMA SITE**

Dear Mr. Duffy:

By letter dated January 28, 2003, Sequoyah Fuels Corporation (SFC) submitted to the U.S. Nuclear Regulatory Commission (NRC), a proposed reclamation plan for its facility in Gore, OK. SFC has revised this proposed reclamation plan several times in response to questions raised by the NRC staff. The NRC staff is preparing an Environmental Impact Statement (EIS) to document its evaluation of the potential environmental impacts from SFC's proposed plan and alternatives to that plan. The EIS is being prepared in accordance with the requirements of the National Environmental Policy Act of 1969, as amended, as specified in 10 CFR Part 51 of the NRC's regulations. In conjunction with its review, the NRC staff also is considering the potential impact of the proposed plan on endangered and threatened species or on critical habitat within the area of influence for the proposed action, in accordance with the Endangered Species Act.

The SFC site is located near the confluence of the Arkansas and Illinois Rivers, 2.5 miles east of Gore, Oklahoma, and 25 miles southeast of Muskogee. The SFC site is on the east bank of a tributary of the Illinois River, the headwaters of the Robert S. Kerr Reservoir. SFC is proposing to reclaim radioactive wastes produced by past site operations and to remediate buildings, site soils, and groundwater impacted by those operations. SFC would construct an engineered onsite disposal cell to contain these wastes and impacted structures and soils, with materials used for cell construction obtained from onsite sources or from nearby quarries. Following reclamation, disturbed areas would be re-graded and re-vegetated. Maps of the site and vicinity are enclosed (Enclosure 1). Orthophotographs of the site and vicinity are provided in Enclosure 2.

Based on information obtained from the U.S. Fish and Wildlife/Oklahoma Ecological Services Field Office's website ([www.fws.gov/ifw2es/Oklahoma](http://www.fws.gov/ifw2es/Oklahoma)), the American burying beetle, the Indiana bat, the interior least tern, the Ozark big-eared bat, the bald eagle, and the piping plover are the Federally-listed endangered and threatened species in Sequoyah County, OK. Based on species-specific information gathered from that website, it does not appear likely that the American burying beetle, the Indiana bat, or the Ozark big-eared bat are present on the SFC site or in its vicinity.

G. Duffy

2

From sighting lists on the Sequoyah National Wildlife Refuge website ([www.fws.gov/southwest/refuges/oklahoma/sequoyah/index.html](http://www.fws.gov/southwest/refuges/oklahoma/sequoyah/index.html)), the interior least tern is commonly seen in the summer and the bald eagle commonly observed in the fall and winter, while the piping plover is only rare sighted.

Because SFC's proposed reclamation and remediation activities would be conducted within its site boundaries, the NRC staff considers that these activities would not adversely affect endangered and threatened species or critical habitat within the area of influence for the proposed action. Therefore, the NRC staff considers that consultation under Section 7 of the Endangered Species Act is not required and requests your office's concurrence with this determination.

If you have any questions concerning this matter, please contact Mr. James Park of my staff. Mr. Park can be reached by phone at (301) 415-5835 or by email at [jrp@nrc.gov](mailto:jrp@nrc.gov).

Sincerely,



B. Jennifer Davis, Chief  
Environmental Review Section  
Division of Waste Management  
and Environmental Protection  
Office of Federal and State Materials  
and Environmental Management Programs

Docket No. 40-8027  
License No. SUB-1010

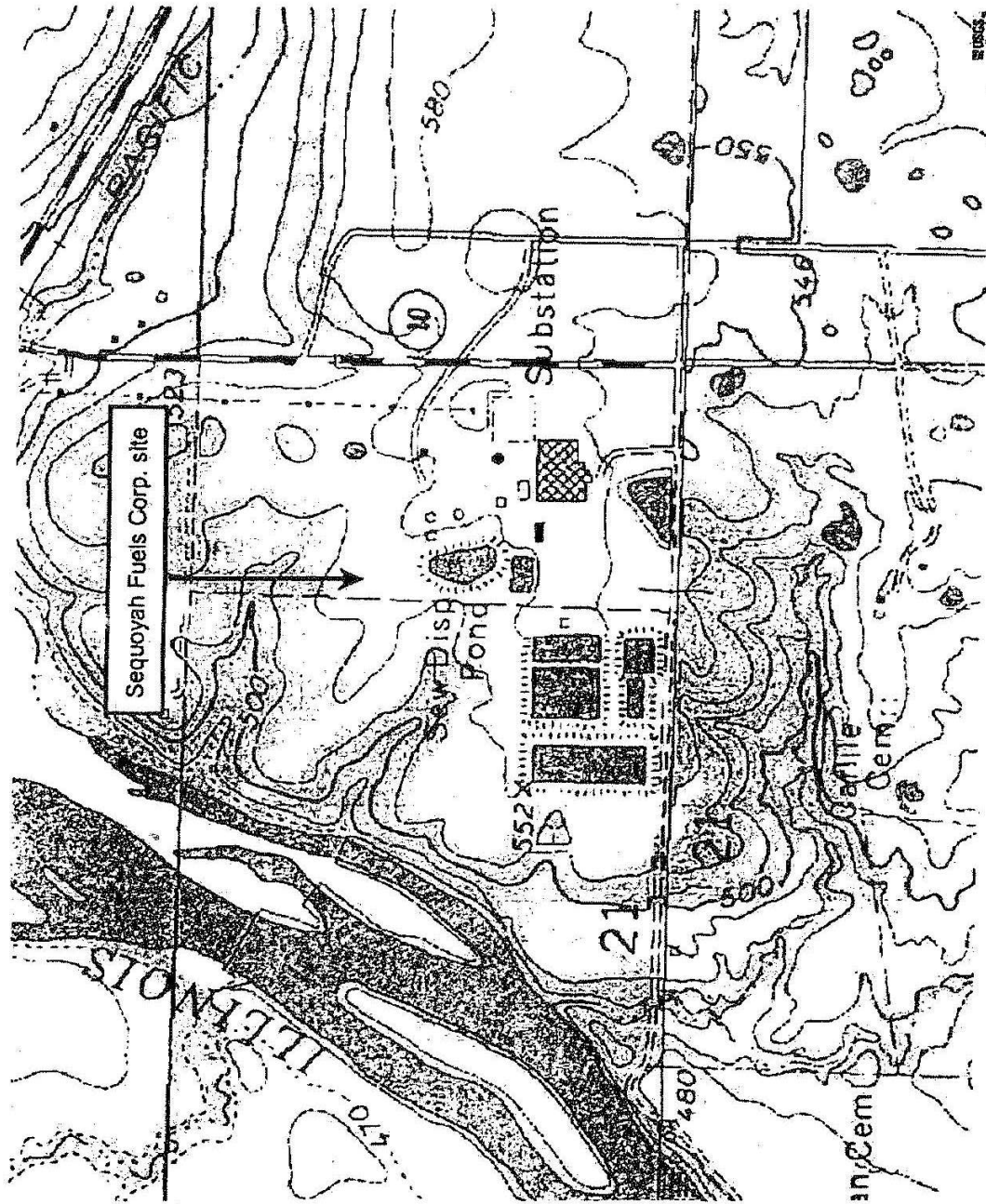
Enclosures:

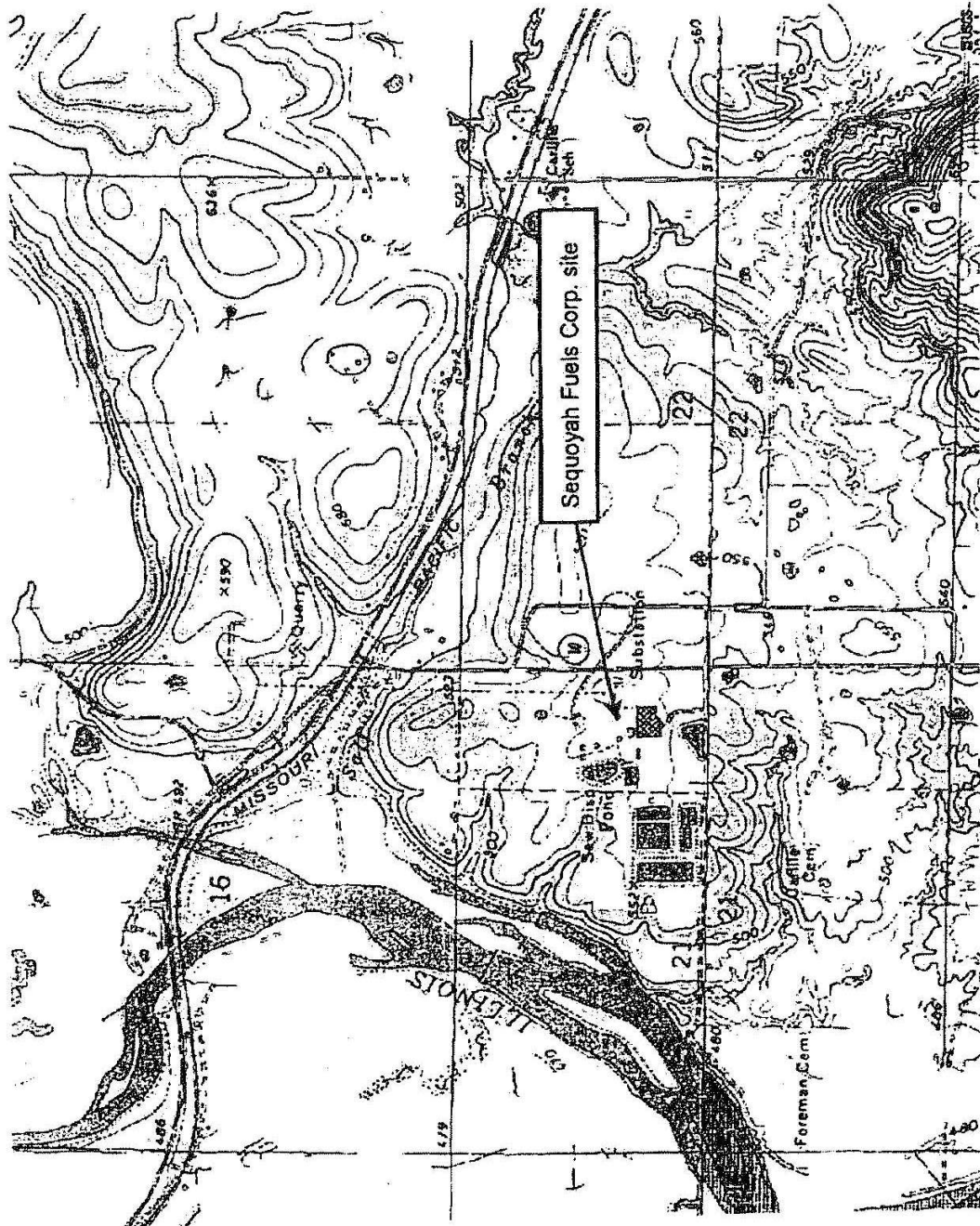
1. Maps
2. Orthophotographs

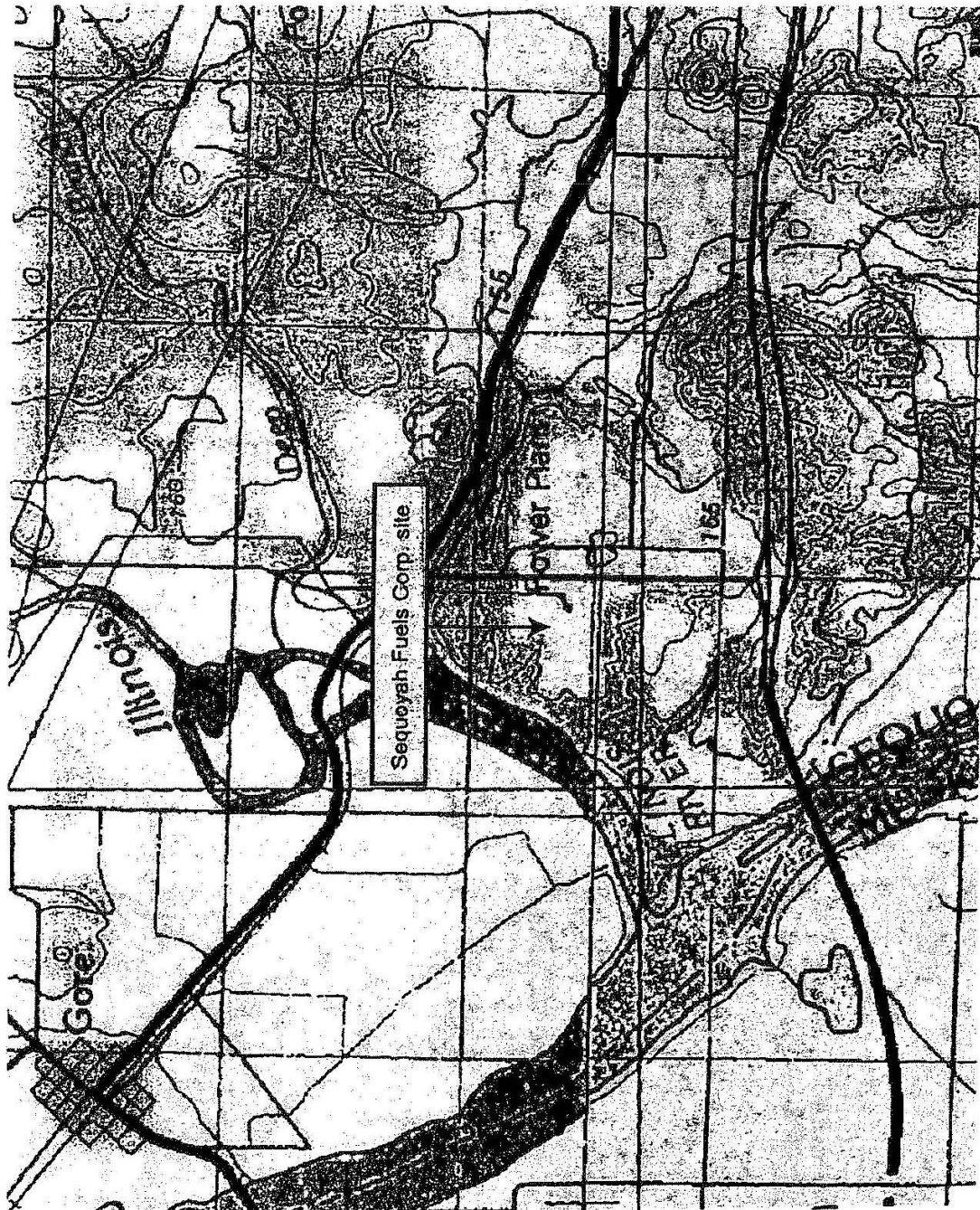
cc: Craig Harlin, SFC

**Enclosure 1**

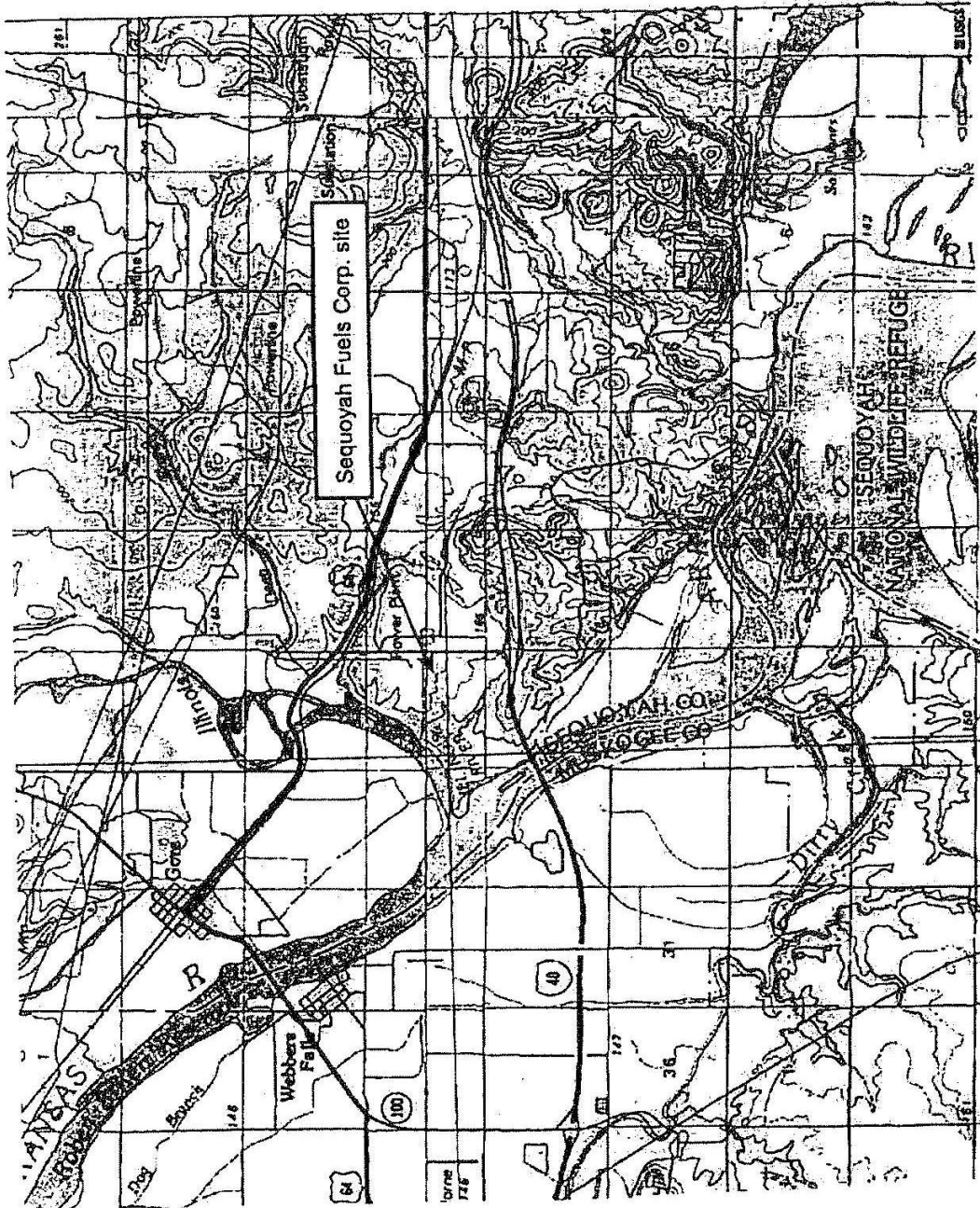
**Maps of Sequoyah Fuels Corporation Site and Vicinity**











**Enclosure 2**

**Orthophotographs of Sequoyah Fuels Corporation Site and Vicinity**





UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

March 19, 2007

Mr. Robert L. Brooks, State Archeologist  
Oklahoma Archeological Society  
111 E. Chesapeake, # 102  
Norman, OK 73019-5111

SUBJECT: REVISED DETERMINATION OF NO ADVERSE AFFECT ON PREHISTORIC  
RESOURCES FROM PROPOSED RECLAMATION OF SEQUOYAH FUELS  
CORPORATION'S SITE IN GORE, OKLAHOMA

Dear Mr. Brooks:

By letter to your attention dated November 27, 2006, the U.S. Nuclear Regulatory Commission (NRC) staff re-initiated consultation under Section 106 of the National Historic Preservation Act of 1966, as amended, for the proposed reclamation of Sequoyah Fuels Corporation's (SFC's) site in Gore, Oklahoma. The NRC staff is preparing an Environmental Impact Statement (EIS) to document its evaluation of the potential environmental impacts from SFC's proposed site reclamation plan and reasonable alternatives to that plan.

In its November 2006 letter, the NRC staff identified the present undertaking as SFC's proposed reclamation of wastes produced by its past site operations and the construction of an onsite disposal cell to contain these wastes and impacted soils. Based on SFC's proposed reclamation activities, the NRC staff determined the "area of potential effect" (APE) to be defined by the boundaries of the SFC site.

The NRC staff also enclosed in its November 2006 letter copies of previous correspondence from you, the Deputy State Historic Preservation Officer, and the Cherokee Nation regarding that proposed project. Based on that correspondence, which stated that there were no historic properties that would be affected by the proposed site reclamation, the NRC staff determined that SFC's proposed reclamation of its Gore, OK site do not adversely affect any historical or cultural properties. The NRC staff requested your concurrence with that determination by that November 2006 letter; however, we are still awaiting your reply.

As part of its EIS process, the NRC staff has identified a reasonable alternative to SFC's proposed reclamation plan. This alternative would involve the shipment offsite of all of the contaminated wastes and soils reclaimed by SFC. Such offsite shipment would necessitate the construction of a three-mile rail spur from the SFC site to the nearest main rail line. Enclosed is a figure showing the approximate route of this potential rail spur.

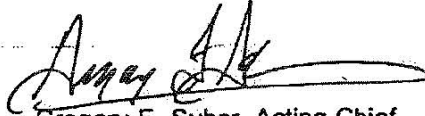
Based on this alternative, the NRC staff is revising its APE to include the potential route of the rail spur. However, given the correspondence noted above, the NRC staff has determined that there are no historic or cultural resources within the expanded APE that would be adversely affected. Therefore, the NRC staff requests your concurrence with this determination.

R. Brooks

2

If you have any questions, please contact Mr. James Park of my staff. Mr. Park can be reached at 301-415-6935 or by email to [jrp@nrc.gov](mailto:jrp@nrc.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Gregory F. Suber", with a long horizontal flourish extending to the right.

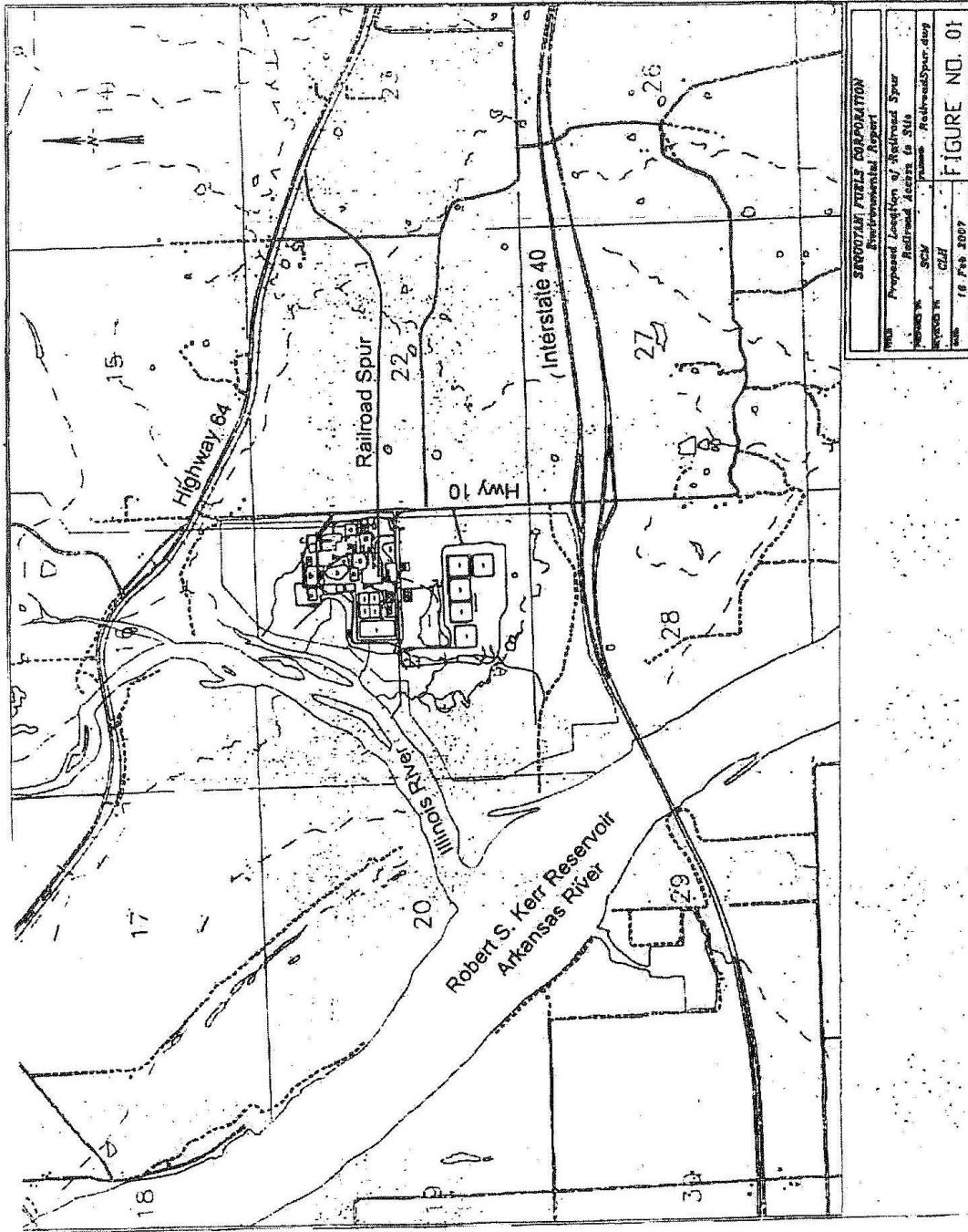
Gregory F. Suber, Acting Chief  
Environmental Review Branch  
Division of Waste Management  
and Environmental Protection  
Office of Federal and State Materials  
and Environmental Management Programs

Docket No.: 40-8027  
License No.: SUB-1010

Enclosure:  
Map of Potential Rail Spur Route

cc:  
Craig Harlin, SFC  
Melvena Reisch, OK State Historic Preservation Office  
Jeannine Hale, Esq., Cherokee Nation

Enclosure  
Map of Potential Rail Spur Route  
(ML070730141)





UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

March 19, 2007

Ms. Jeannine Hale  
Acting Administrator  
Environmental Protection Programs  
Cherokee Nation  
P.O. Box 948  
Tahlequah, OK 74464

SUBJECT: REQUEST FOR IDENTIFICATION OF HISTORIC OR PRE-HISTORIC  
RESOURCES ON OR NEAR THE SEQUOYAH FUELS CORPORATION SITE  
IN GORE, OKLAHOMA

Dear Ms. Hale:

By letter dated January 28, 2003, Sequoyah Fuels Corporation (SFC) submitted to the U.S. Nuclear Regulatory Commission (NRC) staff a proposed reclamation plan for SFC's site in Gore, OK. SFC has revised this proposed reclamation plan several times in response to questions raised by the NRC staff. The NRC staff is preparing an Environmental Impact Statement (EIS) to document its evaluation of the potential environmental impacts from SFC's proposed plan and reasonable alternatives to that plan. The EIS is being prepared in accordance with the requirements of the National Environmental Policy Act of 1969, as amended, as specified in 10 CFR Part 51 of the NRC's regulations. As part of its environmental review, the NRC staff also is considering the potential impact of the proposed plan on historic and cultural resources in accordance with the National Historic Preservation Act.

The present undertaking is the proposed reclamation of wastes produced by past site operations and of site soils and groundwater impacted by those operations. SFC is proposing to construct an onsite disposal cell to contain these wastes and impacted soils. Materials used for cell construction would be obtained from onsite sources or from nearby quarries. Maps of the site and vicinity are enclosed (Enclosure 1).

In the past, the NRC staff has consulted with the Cherokee Nation regarding SFC's proposed decommissioning and reclamation of its site. Enclosed is a response of Mr. David Comingdeer Rabon, dated August 29, 2001 (Enclosure 2), in which he stated that the Cherokee Nation had no objection to decommissioning of the SFC site and that the Cherokee Nation was not aware of any significant historic or pre-historic sites in the project area. SFC's current proposed reclamation activities are similar in scope and extent to those evaluated in that earlier consultation letter.

In addition, as part of its EIS process, the NRC staff has identified a reasonable alternative to SFC's proposed reclamation plan. This alternative would involve the shipment offsite of all of the contaminated wastes and soils reclaimed by SFC. Such offsite shipment would necessitate the construction of a three-mile rail spur from the SFC site to the nearest main rail line. Enclosed is a figure showing the approximate route of this potential rail spur (Enclosure 3).

J. Hale

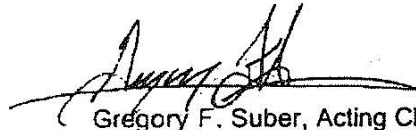
- 2 -

By this letter, the NRC staff is asking if the Cherokee Nation is aware of any historic or pre-historic resources within the SFC site or along the route of the potential rail spur that could be adversely affected by the proposed reclamation of the Gore site.

---

If you have any questions, please contact Mr. James Park of my staff. Mr. Park can be reached at 301-415-6935 or by e-mail to [jrp@nrc.gov](mailto:jrp@nrc.gov).

Sincerely,



Gregory F. Suber, Acting Chief  
Environmental Review Branch  
Division of Waste Management  
and Environmental Protection  
Office of Federal and State Materials  
and Environmental Management Programs

Docket No.: 40-8027  
License No.: SUB-1010

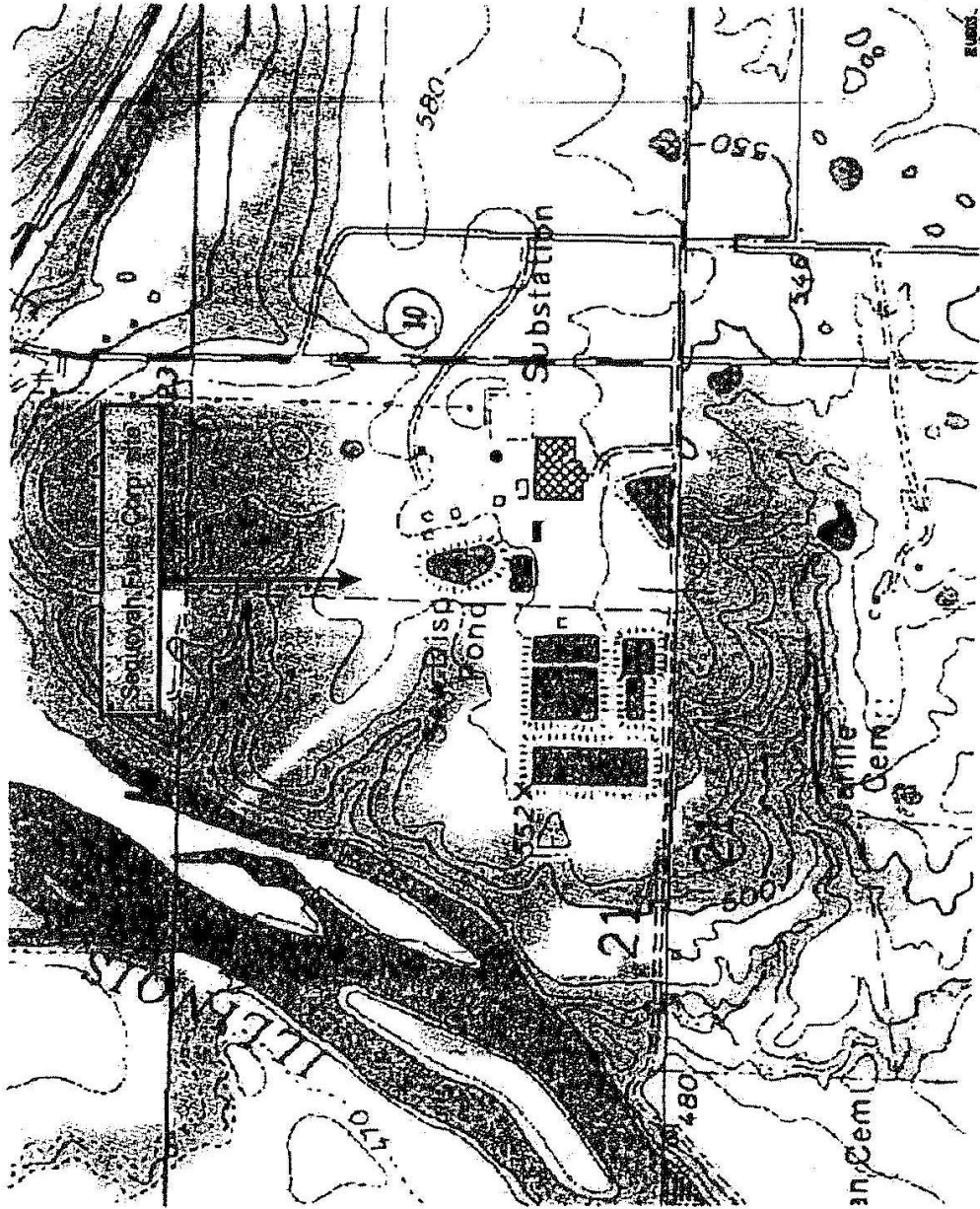
Enclosures:

1. Maps of the SFC site and vicinity
2. August 29, 2001 letter from David Comingdeer Rabon
3. Map of Potential Rail Spur Route

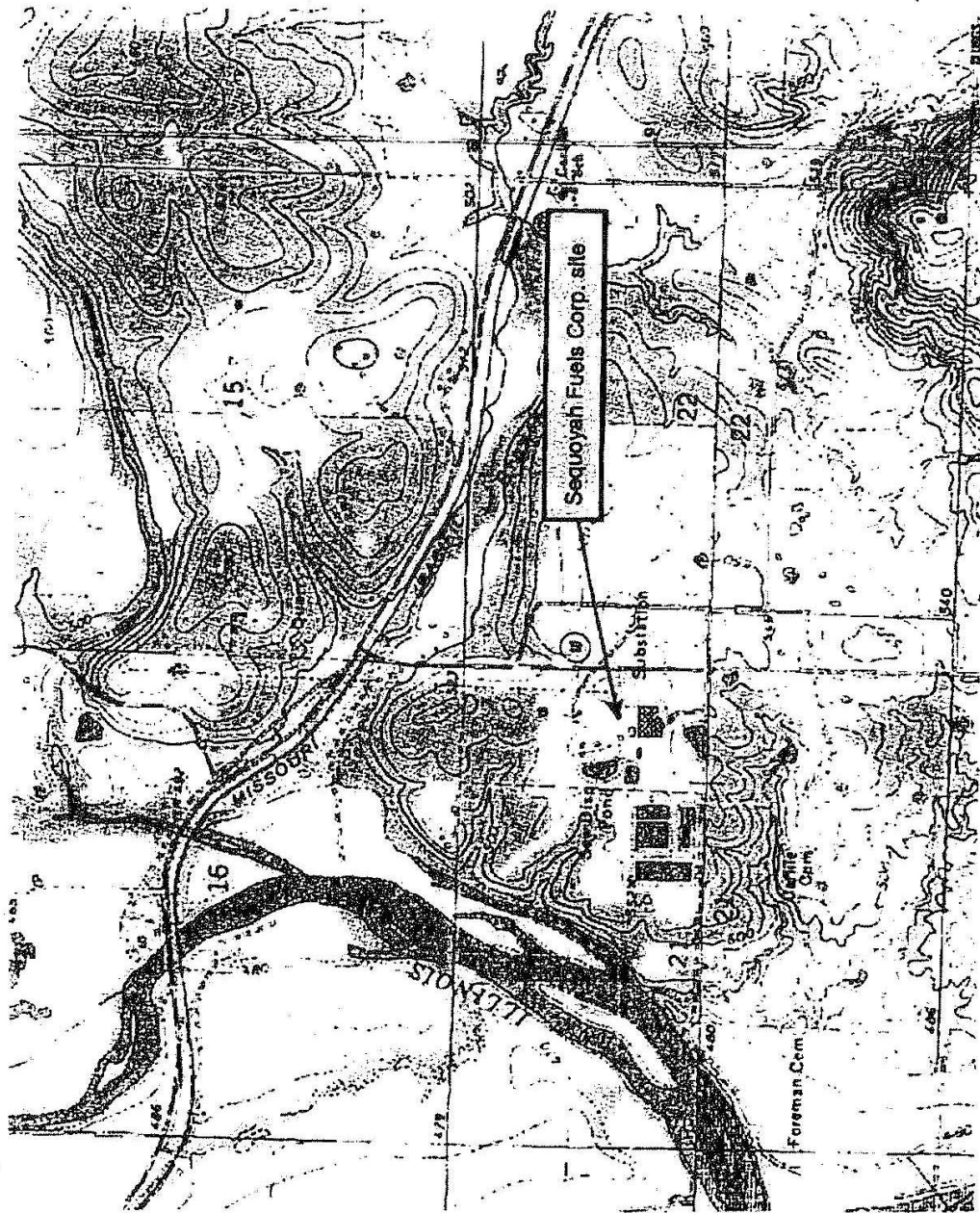
cc:

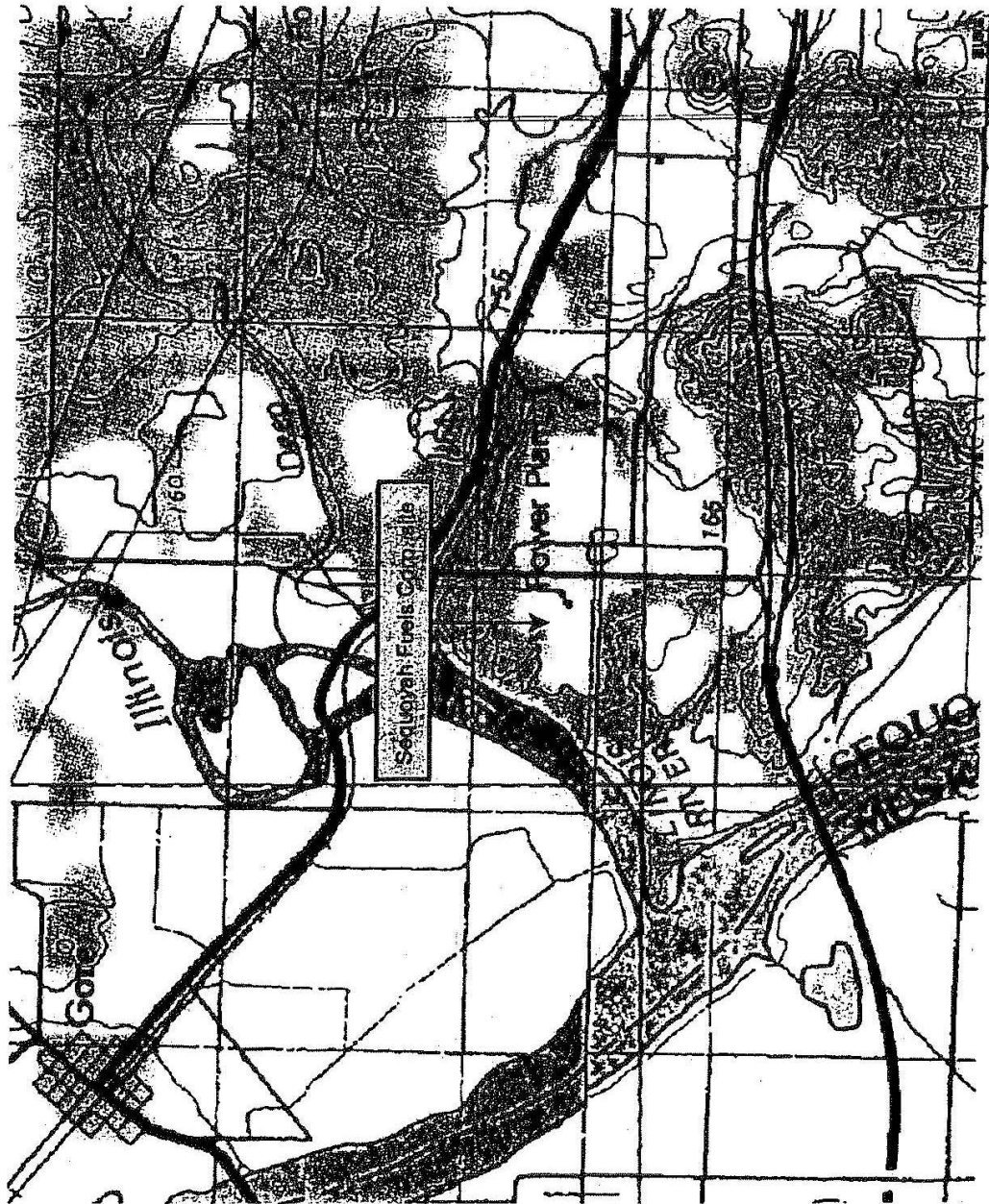
Craig Harlin, SFC  
Melvena Heisch, OK SHPO  
Robert Brooks, OK Archeological Survey

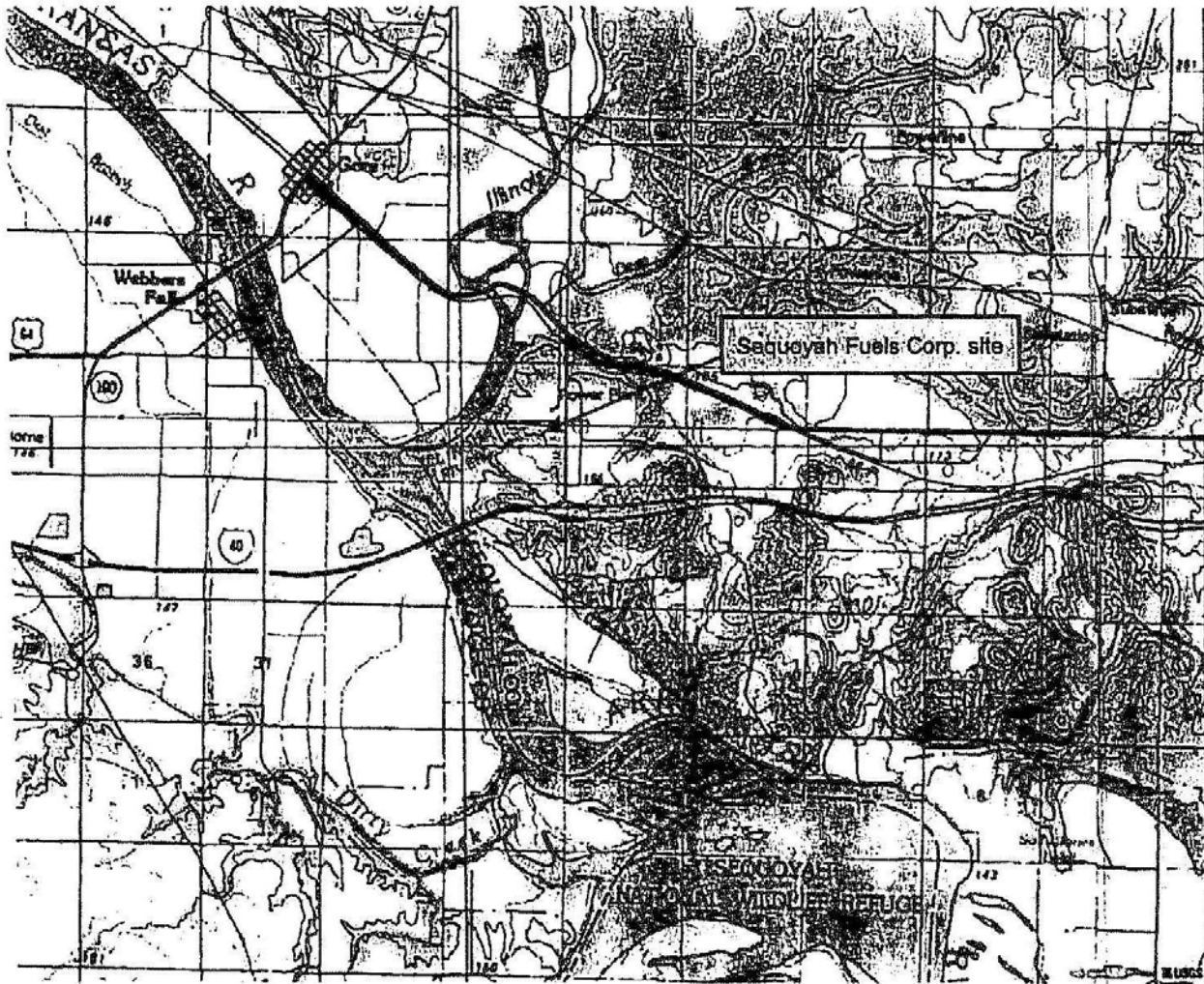
Enclosure 1  
Maps of Sequoyah Fuels Corporation Site and Vicinity  
(ML063110539)





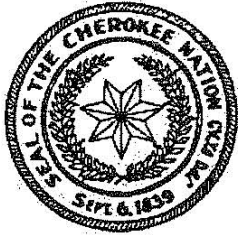






Enclosure 2  
August 29, 2001, Letter from David Comingdeer Rabon,  
Cherokee Nation  
to Phyllis Sobel, NRC  
(ML013650373)

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## CHEROKEE NATION

P.O. Box 948  
Tahlequah, OK 74465-0948  
918-456-0671

40-8027  
Chad "Cornassel" Smith  
O'W'G'I  
Principal Chief

Hastings Shade  
O'W'G'Ih  
Deputy Principal Chief

August 29, 2001

Phyllis Sobel, PH. D.  
Project Manager  
US Nuclear Regulatory Commission  
Washington, DC 20555

Re: The proposed decommissioning of Sequoyah Fuels Site in Sequoyah County, OK

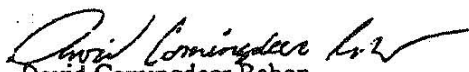
Dear Ms. Sobel,

The Cherokee Nation does not object to your proposed project. We are unaware of any significant historic or pre-historic sites in your project area. However, Native American human remains and associated funerary items may exist in the area, as well as isolated archaeological sites.

Please contact this office if buried archaeological materials such as chipped stone tools, pottery, bone, historic crockery, glass, metal items, or building materials are inadvertently discovered during decommissioning of the site.

If you have any further questions or concerns, please feel free to contact me at the number below.

Wa-do,

  
David Comingdeer Rabon  
Historic Preservation Specialist  
Department of Natural Resources  
Phone: (918) 456-0671 ext. 2631  
Fax: (918) 458-7673

NMSSOIPublic

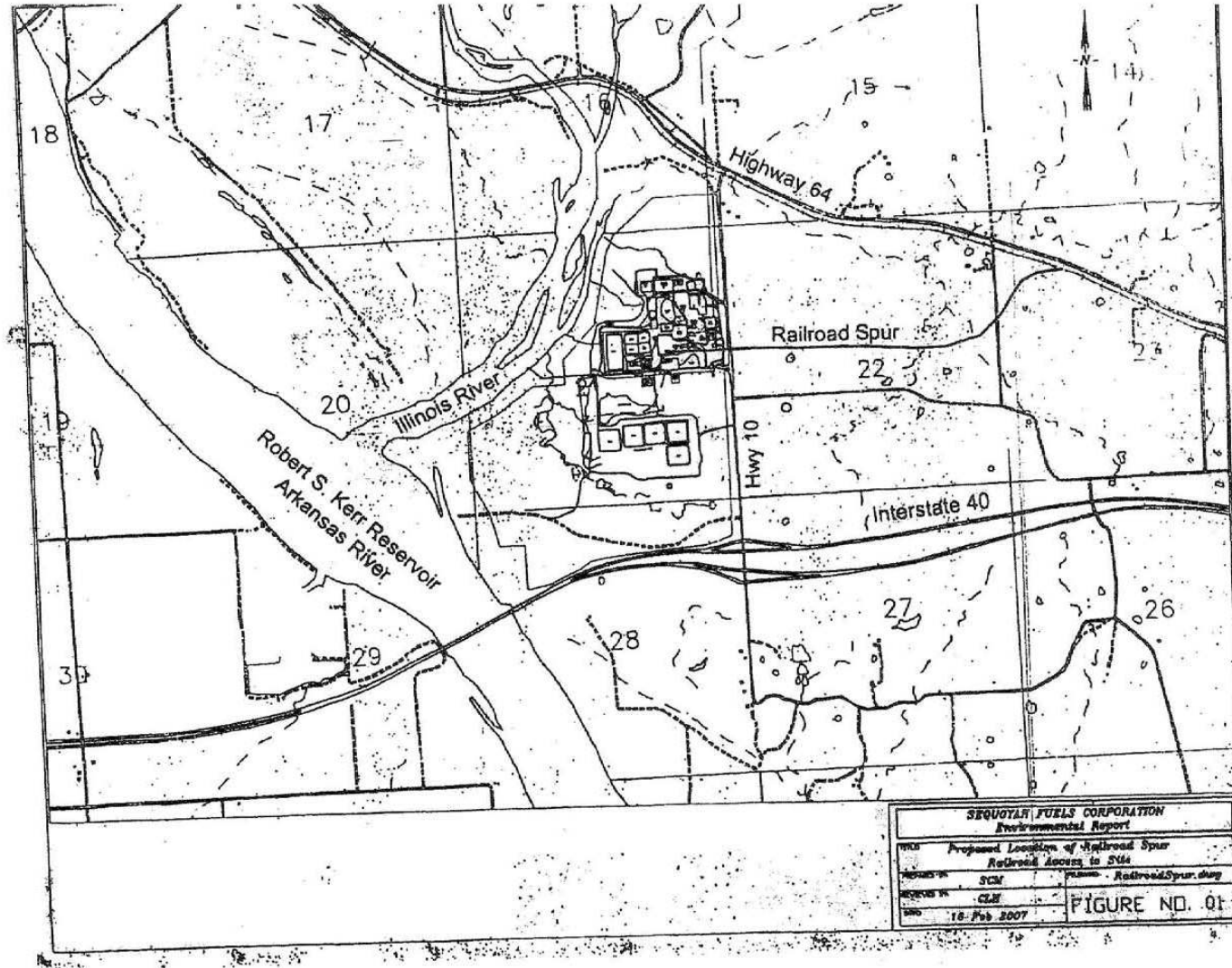
Rec'd from  
NMSS  
12/31/01

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Enclosure 3  
Map of Potential Rail Spur Route  
(ML070730141)



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## Oklahoma Historical Society

Founded May 27, 1893

### State Historic Preservation Office

Oklahoma History Center • 2401 North Laird Ave. • Oklahoma City, OK 73105-7914  
(405) 521-6249 • Fax (405) 522-0816 • [www.okhistory.org/shpo/shpom.htm](http://www.okhistory.org/shpo/shpom.htm)

April 11, 2007

Mr. Gregory Suber, Acting Chief  
Environmental Review Branch  
Div. of Waste Mgmt. & Env. Protection  
Office of Federal & State Materials  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

File #0426-07; Revised Sequoyah Fuels Reclamation Project in  
Grove, Sequoyah County, Oklahoma

Mr. Suber:

In reply to your revised determination of no adverse affect on prehistoric resources from proposed reclamation of materials associated with the Sequoyah Fuels Corporation's site in Gore, Oklahoma, you mention that you are still awaiting our reply to your letter of November 27, 2006, for review of the initial onsite disposal option. Your letter (from Ms. Jennifer Davis), dated November 28, 2006 was received in our office on December 4, 2006. We did respond to Ms. Davis on December 20, 2006, with a finding that no historic properties would be affected. A copy of our response is attached.

In regard to your revised proposal to ship materials off site by way of a three-mile rail spur connected to the nearest main rail line, we concur with Dr. Robert Brooks' recommendation that an archeological survey be conducted of the spur line route. In the event that such an investigation reveals the presence of prehistoric archeological sites, we will defer to the judgment of the OAS concerning whether or not any of the resources should be considered "historic properties" under the Section 106 review process. If sites dating from the historic period are identified during the survey or are encountered during implementation of the project, additional assessments by the State Historic Preservation Office will be necessary.

Thank you for the opportunity to review this project. If you have any questions, please call Charles Wallis, RPA, Historical Archeologist, at 405/521-6381. Please reference the above underlined file number when responding. Thank you.

Sincerely,

Melvena Heisch  
Deputy State Historic  
Preservation Officer

MH:pm  
Attachment

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## Oklahoma Historical Society

Founded May 27, 1893

### State Historic Preservation Office

Oklahoma History Center • 2401 North Laird Ave. • Oklahoma City, OK 73105-7914  
(405) 521-6249 • Fax (405) 522-0816 • [www.okhistory.org/shpo/shpom.htm](http://www.okhistory.org/shpo/shpom.htm)

December 20, 2006

COPY

Ms. B. Jennifer Davis, Chief  
Environmental Review Section  
Office of Federal & State Materials  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

RE: File 0426-07; Sequoyah Fuels Reclamation Project in Gore,  
Oklahoma

Dear Ms. Davis:

We have received and reviewed the documentation concerning the referenced project in Sequoyah County. Additionally, we have examined the information contained in the Oklahoma Landmarks Inventory (OLI) files and other materials on historic resources available in our office. We find that there are no historic properties affected by the referenced project.

Thank you for the opportunity to comment on this project. We look forward to working with you in the future.

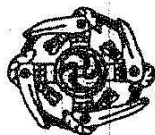
If you have any questions, please contact Charles Wallis, RPA, Historical Archaeologist, at 405/521-6381.

Should further correspondence pertaining to this project be necessary, the above underlined file number must be referenced. Thank you

Sincerely,

Melvena Heisch  
Deputy State Historic  
Preservation Officer

MH:pm



## Oklahoma Archeological Survey

THE UNIVERSITY OF OKLAHOMA

March 28, 2007

Gregory F. Suber  
Acting Chief  
Environmental Review Branch  
Division of Waste Management  
& Environmental Protection  
Office of Federal and State Materials  
& Environmental Management Programs  
Nuclear Regulatory Commission  
Washington, DC 20555-0001



Re: Revised determination of No Adverse Affect on Prehistoric Resources  
From Proposed Reclamation of Sequoyah Fuels Corporation's Site in  
Gore, Oklahoma. Legal Description: N ½ Section 22 and NW ¼  
Section 23 T12N R21E, Sequoyah County, Oklahoma.

Dear Mr. Suber:

I have examined the above referenced action pertaining to its potential affect on Oklahoma's cultural heritage. I concur with the finding that on-site reclamation of the Sequoyah Fuel's locality will have no effect on archaeological and/or historic cultural resources eligible for the National Register of Historic Places. In regard to the proposed alternative plan of shipping contaminated soils and wastes off-location by rail, I have examined the proposed railroad spur line for the presence of previousl recorded archaeological sites. There are no known or previously recorded sites within the proposed spur corridor although an historic site (34SQ337) does exist to the south of the spur in Section 22. However, the right-of-way for the railroad spur has not been examined for cultural resources. Considering the sensitivity of this setting (confluence of the Illinois and the Arkansas rivers) and the potential for post-removal Cherokee settlements, it is my opinion that the spur should be examined for cultural resources if this alternative is selected.

This review has been conducted in cooperation with the State Historic Preservation Office,  
Oklahoma Historical Society.

Sincerely,

Robert L. Brooks  
State Archaeologist

Cc: SHPO



In Reply Refer To:  
FWS/R2/OKES/  
21440-2008-B-0004

## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Division of Ecological Services  
9014 East 21<sup>st</sup> Street  
Tulsa, Oklahoma 74129  
918/581-7458 / (FAX) 918/581-7467



March 13, 2008

Allan H. Fetter  
US Nuclear Regulatory Commission  
Environmental Review Branch  
Mail Stop T-8 F5  
Washington, DC 20555-0001

Dear Mr. Fetter:

Thank you for your December 12, 2007, request for section 7 consultation and your request for comments on the submitted September 2007 Draft Environmental Impact Statement (DEIS) regarding the reclamation of the Sequoyah Fuels Corporation site near Gore, Sequoyah County, Oklahoma. Our comments are submitted in accordance with section 7 of the Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), and National Environmental Policy Act (NEPA).

The endangered American burying beetle (ABB) *Nicrophorus americanus* historically occurred and/or is believed to currently persist in and/or around the project area. In addition, adjacent counties have historic and current records of the ABB. The current distribution of the ABB is available from our ABB website at <<http://www.fws.gov/southwest/es/oklahoma/beetle1.htm>>. The presence of the ABB is closely associated with carrion availability. Consequently, the ABB has been found in a variety of habitats (U.S. Fish and Wildlife Service 1991, Creighton *et al.* 1993). The ABB is closely tied to soil, spending between 7 and 10 months in the soil during the winter inactivity and spring reproduction.

On February 27, 2008, the U.S. Fish and Wildlife Service (Service) met with you and Sequoyah Fuels representatives to discuss the reclamation proposal and to inspect the site. Based on the information provided during the meeting and site visit, suitable habitat and soil for the ABB is present in the proposed project area. Further, since ABBs have been captured in or near your project site, the proposed project will involve ground disturbance, and ABBs inhabit the soil for the majority of their life cycle, the ABB could be adversely impacted by the proposed project. Enclosed is the 'Conservation Approaches for the American Burying Beetle' detailing the options available for incorporation into your project design and development to avoid or minimize adverse impacts to the ABB. These are the options the Service presented at our



Mr. Fetter

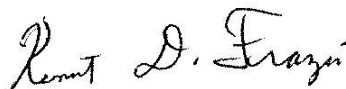
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meeting. Please review and incorporate the appropriate guidelines into your project design. To finalize the section 7 consultation, updated consultation correspondence reflecting the ABB Conservation Measures that will be implemented, must be submitted to our office and a response from us must be received.

The MBTA provides protection to migratory birds (any bird listed in 50 CFR 10.13) throughout the U.S., Canada, and Mexico. Under the MBTA, taking, killing, and possession of migratory birds, and their eggs, young, or active nest is prohibited unless authorized by permit from the Secretary of the Interior. Permits authorizing incidental take are not issued. Although the provisions of MBTA are applicable year-round, most migratory bird nesting activity in Oklahoma occurs from the beginning of March through the end of July. Since numerous migratory birds inhabit the project area and could be taken through project actions, the Service recommends implementing construction activities that could destroy migratory birds, their eggs or nest, between the first of August and the end of February. In addition, the Service requests mitigation for the loss of habitat for migratory birds, the ABB, and other fish and wildlife resources, as authorized under NEPA.

We appreciate the opportunity to review your proposed project and provide comments. Please include the project number at the top, left of the front page. This correspondence is valid for one year from the above date. If you have any questions, please contact Hayley Dikeman at 918-382-4519.

Sincerely,



Kenneth D. Frazier  
Assistant Field Supervisor

Enclosure

#### References

- Creighton, J.C., M.V. Lomolino, and G.D. Schnell. 1993. Survey methods for the American burying beetle (*Nicrophorus americanus*) In Oklahoma and Arkansas. Oklahoma Biological Survey, Norman, Oklahoma.
- U.S. Fish and Wildlife Service. 1991. American Burying Beetle (*Nicrophorus americanus*) Recovery Plan. Newton Corner, Massachusetts. 80 pp.



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Division of Ecological Services

9014 East 21<sup>st</sup> Street

Tulsa, Oklahoma 74129-1428

918/581-7458 / (FAX) 918/581-7467



### Conservation Approach for the American Burying Beetle (ABB) In Counties<sup>1</sup> Lacking or with Limited Recent Survey Data<sup>2</sup>

Updated March 2008

The ABB once occurred throughout the eastern United States. Today the ABB's range is restricted to less than approximately 10 percent of its former range. The historic and current ranges of the ABB, and other related ABB life history information can be obtained from our ABB web site: < <http://www.fws.gov/southwest/es/oklahoma/beetle1.htm>>.

The ABB is nocturnal (*i.e.*, active only at night), has a life span of about one year, feeds and breeds on carrion, and is considered a feeding habitat generalist. American burying beetles enter an inactive period, spent underground, when nighttime ambient low temperatures are consistently (*i.e.*, at least 5 consecutive days) 60°F or below. In Oklahoma, this typically occurs from September 20 through May 20. Once nighttime low temperatures are consistently above 60°F, ABBs emerge and become active. The active period in Oklahoma typically occurs from May 20 through September 20.

The ABB has been captured via baited pitfall traps in a variety of habitats including grasslands, grazed pasture, bottomland forest, riparian zones, and oak-hickory forest (Creighton *et al.* 1993; Lomolino and Creighton 1996; Lomolino *et al.* 1995; NatureServe Explorer 2003; and U.S. Fish and Wildlife Service 1991). Although ABBs are known to occupy numerous habitat types, they exhibit close associations with carrion and soil during feeding and reproduction. While ABBs are able to utilize any carcass for feeding, they require specific sized carrion for reproduction (Bedick *et al.* 1999).

The appropriate size of carrion needed for reproduction is 100-200 grams (approximately the size of a cotton rat). Availability of suitably sized carrion in a given area is suspected to be a major factor influencing habitat selection by ABBs (U.S. Fish and Wildlife Service 1991). American burying beetles have been recorded detecting carrion from a distance of 2 miles and moving an average distance of approximately 0.5 miles per night (Creighton and Schnell 1998).

Soil conditions where the species occurs must be conducive to excavation by ABBs (Anderson 1982, Lomolino and Creighton 1996). Soil related activities include burial of carcasses for egg deposition, development of young in the soil from egg through pupal stages, parental care of developing young underground, and retreat of adults underground to overwinter. Soils in the vicinity of ABB captures range from sandy and silt loams in the western part of their range to glacial marine deposits in the eastern part of their range (U.S. Fish and Wildlife Service 1991). The adults also typically reside in the duff or bury themselves in the soil during daylight hours of their active season (May 20 to September 20).

Because the ABB may be present in your project area, the Oklahoma Ecological Services Field Office recommends that one of the following Conservation Approaches be implemented to avoid or minimize impacts to the ABB.

#### **Conservation Approach 1**

Conduct ABB surveys to more precisely determine presence or absence and capture rate of the ABB within your immediate project area. The ABB survey protocol we recommend is the "U.S. Fish and Wildlife Service American Burying Beetle *Nicrophorus americanus* Survey Guidance In Oklahoma", which can be downloaded from our ABB website. A valid section 10 permit from the U.S. Fish and Wildlife Service (Service) is required for anyone conducting such surveys. A list of current permit holders and related information also can be obtained from our ABB website. All surveys must be conducted during the ABB's active period and take place no earlier than one year prior to initiating ground disturbing activities; otherwise, another survey may be necessary. All survey results, positive or negative, must be submitted in writing to this office for review prior to initiating any ground disturbing activities.

If survey results are negative (*i.e.*, no ABBs were captured at your project site), and you have received concurrence from the Service, the project can proceed immediately. Conversely, if survey results are positive, or ABBs are definitely known to occur in proximity to the project area based on other data, ABBs potentially could be impacted by your proposed project. One of the following Avoidance Measures must then be implemented to avoid and/or address adverse impacts and unauthorized take of the ABB. Because ABBs enter an inactive period underground when nighttime low temperatures are consistently below 60°F, the timing of project ground disturbance is crucial in relation to the selection of the appropriate Avoidance Measure and influences how effectively the available Avoidance Measures achieve conservation goals and

comply with the Endangered Species Act of 1973, as amended (ESA).

### **Avoidance Measure 1**

Unauthorized take and most adverse impacts to the ABB can be avoided for most projects by removing the ABB from the project area by using one of the protocols below. Implementing either of these protocols ensures that further section 7 consultation will not be required unless your project plans change, or if additional information on the distribution of listed or proposed species becomes available.

*Bait Away Protocol* – Involves distributing the appropriate bait outside of the proposed disturbance area to lure ABBs a sufficient distance away from the areas to be disturbed.

*Trap and Relocation Protocol* – Involves trapping ABB within the area to be disturbed and then relocating any captured ABBs to a suitable relocation site.

The Service's current "Bait Away" and "Trap and Relocation Protocols" can be downloaded from our ABB website. Both of these measures must be implemented during the ABB's active period and in accordance with the Service's recommended protocols. If the time frame for project ground disturbance is not planned to occur during the ABB's active period, ground disturbance may have to be postponed until onset of the next active period. Where construction during the ABB's active period is not possible, but project planning occurs during the ABB's active period, ground disturbance can proceed during the inactive period provided baiting away or trapping and relocating is successfully conducted just prior to the onset of the inactive period corresponding with project ground disturbance.

Like surveys, trapping and relocating ABBs must be conducted under the authority of an appropriate section 10 permit from the Service. Any relocation site must be coordinated with this office. Although a section 10 permit from the Service is not currently required to conduct baiting away activities, a permit for such activities could be required in the future. The Service does prefer a section 10 permitted biologist, or at a minimum a wildlife biologist, conduct such activities. A "Relocation Data Form" or a "Bait Away Form" must be submitted to this office within 30 days following cessation of relocation or bait away efforts, respectively. Section 7 consultation is not considered complete until the proper form is submitted. These forms can be downloaded from our above mentioned ABB website.

**Avoidance Measure 2**

If ground disturbance cannot be postponed until the ABB's active period, or baiting away or trapping and relocating at the site just prior to the onset of the ABB's inactive period is not possible, then additional consultation with the Service is necessary to minimize and/or mitigate adverse impacts to the ABB. At this point formal consultation in accordance with section 7 should be initiated with this office.

Section 7(a)(2) of the ESA requires federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any federally-listed threatened or endangered species, or result in adverse modification or destruction of designated critical habitat. Critical habitat has not been designated for the ABB, so this is not an issue. When the federal action agency determines that its action "may affect" a federally-listed threatened or endangered species or designated critical habitat, the agency is required to enter into formal consultation with the Service. A request from the federal action agency initiating formal consultation must be made in writing to this office. The federal agency, or their designated non-federal representative, will need to prepare a biological assessment for submission to the Service for review. At a minimum the biological assessment should include: a detailed project description; project schedule (including date for initiating ground disturbance); implementation methods; disturbance type, amount, and duration; and current habitat and land use of the project site. More detailed information on the section 7 consultation process is available at the Service's website < <http://www.fws.gov/southwest/es/oklahoma/sect7.htm>>.

**Conservation Approach 2**

Provide habitat mitigation for the ABB due to the temporary or permanent loss of ABB habitat instead of conducting surveys, and baiting away or trapping and relocation through formal consultation. This Conservation Approach can avoid any potential delays in project implementation due to the ABB. In addition, this approach provides long-term conservation benefit for the ABB.

The prevailing theory on the ABB's decline is the loss, degradation, and fragmentation of habitat, and the resulting decrease of prey and increased competition for prey from such habitat alterations (USFWS 1991, Sikes and Raithe 2002). Consequently, the Service has identified priority ABB habitat conservation areas in Oklahoma. The determination of these priority sites

was based on the areas being: large tracts of unfragmented land, managed for natural resource conservation, held in perpetuity, and known to contain ABBs. Further the Service has coordinated with The Nature Conservancy to establish an ABB Conservation Fund Account. This account is held by TNC and is strictly utilized for the acquisition of ABB habitat in priority areas and study of the ABB's life history and ecology.

Contributions can be made to this account as habitat mitigation for impacts to ABB habitat from proposed projects. Further consultation with the Service is needed to determine eligibility for this Conservation Approach and to address take of ABBs from the proposed project. Please contact Hayley Dikeman with our office for additional information.

### **Conclusion**

Due to the large number of projects we review, incomplete requests can significantly delay our evaluation of your project. A list of information generally required by the Service to fully evaluate such requests may be obtained from our website at < <http://www.fws.gov/southwest/es/oklahoma/sect7.htm> >. In addition, for projects within the historic range of the ABB, a completed "ABB Project Evaluation Form" should be submitted to this office for review. This form will allow staff to more accurately determine the potential impacts of the proposed project. This evaluation form also is available on our ABB web site.

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<sup>1</sup>Adair, Atoka, Bryan, Cherokee, Choctaw, Coal, Craig, Creek, Delaware, Hughes, Johnston,  
Marshal, Mayes, McIntosh, Muskogee, Nowata, Okfuskee, Okmulgee, Osage, Ottawa, Pawnee,  
Pontotoc, Pushmataha, Rogers, Seminole, Sequoyah, Tulsa, Wagoner, and Washington counties

<sup>2</sup>Recent is defined as no older than five years from current date.