# AFFIDAVIT OF KENNETH H. SCHLAG

I, Kenneth H. Schlag, being duly sworn, hereby state as follows:

- My name is Kenneth H. Schlag. I am a Hydrogeologist at Sequoyah Fuels Corporation (SFC). A statement of my professional background is contained in Attachment A to this Affidavit.
- 2) My professional responsibilities for SFC include administration and review of the groundwater monitoring program at SFC. I am also responsible for evaluating results of groundwater, soil, and vegetation sampling associated with SFC's fertilizer program.
- 3) The purpose of this affidavit is to respond to the portion of paragraph 10 of the "Affidavit of Timothy P. Brown" dated December 27, 1993 (the "Brown Affidavit"), which states:

SFC's Fertilizer Completion Reports have indicated that levels of nitrate and cadmium have at times been above the Environmental Protection Agency's drinking water limits, and that levels of gross alpha emission and uranium have been above the currently proposed EPA limits for radioactive substances (see: Sequoyah Fuels Corporation, Ammonium Nitrate Fertilizer Program, 1989 Completion Report, April 1990). [The "1989 Completion Report."]

- 4) It is not entirely clear to what Mr. Brown is referring when he references EPA's drinking water standards (MCL) and compares them to SFC's fertilizer (SFC-N) constituent levels in the 1989 Completion Report. If Mr. Brown is comparing SFC's fertilizer's metals content to drinking water standards, he is correct in asserting SFC-N exceeds the MCLs for Cadmiun, and Nitriate. However, this comparison is irrelevant since the material is a fertilizer, not drinking water; is not meant for human consumption; and did not exceed any limit applicable to it.
- 5) With respect to EPA's proposed levels of gross alpha emission and uranium, Mr. Brown is wrong. EPA's proposed MCL for gross alpha and uranium are 15 pCi/l and 20 ppb respectively. SFC-N meets both of these limits.
- 6) If Mr. Brown was referring to ground water monitor well results, Mr. Brown is also mistaken. The MCL for cadmium is 0.01 mg/l (ppm) and the MCL for nitrates is 10 mg/l. The monitor well samples reported in the 1989 Completion Report showed cadmium and nitrate levels equal to or less than these values. Also, the EPA's limit on gross alpha excludes uranium. Therefore, to compare the reported levels of alpha to the MCL, one must convert U-238 mg/l (ppm) to pCi/l, and subtract this from the gross alpha level. In that case, 49 of 50 samples are less than the MCL for alpha, and one sample is 15.29 versus an MCL of 15. The well associated with this last sample was 3.8

pCi/l when re-sampled the following month and the average of the five gross alpha samples taken on the well that season was less than 7.3 pCi/l. Finally, the highest level of uranium contamination contained in the 1989 Completion Report is 13 ppb; less that the EPA's proposed standard of 20 ppb. In any event, the comparison with MCL is irrelevant since the water in this area is not a useful drinking water supply. "The areas used for the fertilizer program are not in the alluvial soils and water quality is poor and yield are very low averaging only about 0.5 gpm". SFC Fertilizer Program Report, 1973-1986, Dr. Bill B. Tucker et al, Publication No A-88-4, Oklahoma State University, at 96.

7)

The statements of fact in this Affidavit are true and correct to the best of my knowledge, information, and belief.

Date: Jan 10, 1994

and Kenneth H. Schlap

STATE OF OKLAHOMA, ) ) ss COUNTY OF SEQUOYAH, )

Subscribed and sworn to before me this  $10^{\frac{10}{2}}$  day of  $20^{\frac{10}{2}}$ , 1994.

My commission expires: Sept 28, 1995

Attachment A

#### RESUME OF

KENNETH H. SCHLAG

### EDUCATION

B.S. in Geology, University of Arkansas, Fayetteville, 1984. Westark Community College, Fort Smith, Arkansas 1977-1978.

#### CERTIFICATION

Arkansas Professional Geologist, Registration No. 1130 Hazardous Waste Worker Training, OSHA STD.29 CFR 1910.120 Troxler Nuclear Density Instrumentation Training

#### PROFESSIONAL EXPERIENCE

October 90 - Present, Hydrogeologist, Sequoyah Fuels Corporation, Gore, Oklahoma.

Routine responsibilities include direct interfacing with federal, state and county regulatory agencies. Review, interpret, trend and maintain data related to groundwater, soil, surface water, sediment and vegetation. Develop, implement and supervise projects for the Environmental Department. Provide technical support and regulatory guidance to other departments. Advise management on specific matters involving RCRA, CERCLA, Clean Water Act, State Water Quality Standards and NRC License conditions. Assist in specification and selection of equipment and supplies for various projects. Ensure routine monitoring and special projects are completed in a satisfactory manner. Develop procedures to assure compliance with regulatory requirements. A partial list and brief project description is presented below:

- Storm Water Reservoir, completed May 1991. A \$1 million storm water management project. Supervised the construction of a 16 acre earthen dam impoundment where storm water is diverted for natural bio-denitrification processes.

- Facility Environmental Investigation (FEI), completed July 1991. A \$3 million environmental characterization of the 85 acre facility site. Instrumental in coordinating and locating over 175 monitoring wells, 200 soil borings, and tracking of over 10,000 soil and water samples. Reviewed work plans and status reports of the comprehensive 9 month plan to further characterize contamination and evaluate future remedial options. The Consultant's direct contact for invoicing and material control. Directed the performance of the RCRA RFI type investigation and assisted in the technical review of the NRC Order Modifying License (OML) response.

- The Facility Action Plan (AP), completed January 1992. A direct result of the findings from the FEI. Coauthored and developed the masterplan for evaluating future remedial options.

- The Facility Groundwater Monitoring Plan, completed March 1992. Formulated and developed the groundwater monitoring program needs. Was one of the principle authors of the plan which provides guidance and rationale for both EPA and NRC License requirements.

- License Renewal Department Coordinator, completed September 1992. Was the Environmental Department contact for licensing activities associated with the NRC license renewal application. Was one of the principle authors of the Environmental Program Plan supplement to the renewal application. The Program Plan is a comprehensive document providing rationale for the frequency, monitoring parameters and locations for groundwater, soil, sediment, surface water, vegetation, and air monitoring.

<u>April - October 90, Engineering Geologist,</u> Grubbs, Garner & Hoskyn, Inc., Fort Smith, Arkansas.

Responsible for geotechnical construction QA/QC and materials testing lab QA/QC. Supervised and performed both field and laboratory tests on soil, rock, and concrete using ASTM and AASHTO methods. Assisted in planning field work and evaluating data for Geotechnical Reports. Instrumental in solving construction related hydrogeological problems.

Jan. - April 90, Interim Manager - Engineering Geologist, Professional Service Industries, Inc., (formerly Shepherd Engineering, Inc.), Van Buren, Arkansas.

Responsible for office management during ownership transition. Duties also included supervision, planning, and written proposals for geotechnical drilling operations. Planning of construction materials testing and evaluating data from field and laboratory testing for foundation design.

Dec. 84 - Jan. 90, Engineering Geologist - Drilling Supervisor, Shepherd Engineering, Inc. (formerly Arkansas Laboratories, Inc.), Fort Smith, Arkansas.

Responsible for the geotechnical drilling operations. This responsibility included planning field drilling operations, supervision of the field crews, logging test borings, evaluation of the data and adaptation of exploration programs for approximately 100 projects per year. Duties also included writing proposals and assisting in the geological and hydrogeological aspects of geotechnical investigation reports for buildings, pavements, bridges, and earth retaining structures, as well as performing both field and laboratory tests on rock, soil, asphalt, and concrete using ASTM and AASHTO methods.

Jan. - July 82, Engineers' Assistant, 19th Seed Company-Alpine Construction Company, Chickasha, Oklahoma.

Prospected for specific types of borrow pits for use along U.S. Hwy. 69 from Kansas to Texas. Logged test borings for borrow pits and for coal exploration in the eastern half of Oklahoma. Obtained landowners' permission for such drilling and provided hole layouts for the drillers. Acquired leases for coal related activities, collected and maintained coal analyses and recorded locations on topographic maps and aerial photos. Had some experience estimating coal reserves.

## PROFESSIONAL AFFILIATIONS

National Water Well Association, AGWSE Div. American Association of Petroleum Geologists AAPG Energy Minerals Division Oklahoma Society of Environmental Professionals Fort Smith Geological Society Environmental Federation of Oklahoma Air & Waste Management Association, Okla. Chapter