STATEMENT OF WORK FOR DR. EILEEN JOHNSON FOR REVIEW OF THE U. S. DEPARTMENT OF ENERGY DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR A PROPOSED GEOLOGIC REPOSITORY FOR HIGH-LEVEL RADIOACTIVE WASTE AT YUCCA MOUNTAIN, NEVADA

BACKGROUND:

The U.S. Department of Energy (DOE) has prepared a draft environmental impact statement (DEIS) for a proposed geologic repository for the disposal of high-level radioactive waste (HLW) at Yucca Mountain, Nevada. This DEIS will be submitted in support of any site recommendation report to the President that is required by law. The Nuclear Regulatory Commission (NRC) has special expertise related to radiological health and safety and has jurisdiction to license the construction, operation, and closure of such a repository. The NRC also has responsibility under the National Environmental Policy Act of 1969 (NEPA) to provide comments on the DEIS. Additionally, the Nuclear Waste Policy Act of 1982, as amended, requires NRC to provide sufficiency comments on the site recommendations to the President made by DOE.

DOE released the DEIS for public comment on August 5, 1999. The public comment period is scheduled to last 180 days. NRC will conduct a thorough review of the DEIS during this period, and the Center for Nuclear Waste Regulatory Analyses (CNWRA) will provide technical support in the review. The CNWRA requires consultant support from Dr. Johnson for the DEIS.

STATEMENT OF WORK:

Dr. Johnson is to conduct an evaluative review of the DEIS in the area of cultural impacts.

The evaluative review shall include an evaluation of supporting data, data-gathering methods, analysis methods, and any relevant supporting documents to determine whether the stated environmental impacts have been adequately supported. The evaluative review shall also include an assessment of potential environmental impacts and the proposed mitigation measures. Significant assumptions and areas of uncertainty that underlie the stated impact for the preferred and alternative disposal options should also be identified and evaluated. Dr. Johnson should specifically comment on any areas of the DEIS that, in her experience, would likely be at issue during the judicial review process.

If Dr. Johnson identifies concerns regarding a predictive methodology used in the DEIS, an alternative preferred methodology should be described and a rationale for this preference should be provided. Any comments should be specific and should provide a path for resolution. The CNWRA will provide an example of an appropriate comment format. These comments should include an identification of any required copyrighted references or areas requiring additional clarification.

The evaluative review comments are to be provided to the CNWRA by October 25, 1999.

Comments are to be submitted in hard copy and electronically, in a format compatible with WordPerfect Version 8.0.

The reviewer shall comply with all applicable quality assurance requirements of the CNWRA. A quality

assurance indoctrination will be provided at a kickoff meeting to be held at CNWRA facilities in San Antonio, Texas, during August or September 1999.

LEVEL OF EFFORT:

The level of effort for the review is 60 hours.

Dr. Johnson should plan for travel to participate in the following meetings:

> One meeting of one day duration at the CNWRA in San Antonio, Texas, to initiate the review. The specific date will be negotiated.
>
> One meeting of two-day duration at NRC headquarters in Rockville, Maryland, for a technical exchange with DOE, tentatively scheduled for the week of October 1, 1999.
>
> Two public meetings of two-day duration in Las Vegas, Nevada, during October and November 1999. One of these meetings shall include an additional one-day visit to the Yucca Mountain site. Trip reports documenting important issues, conclusions, or results from the public meeting shall be submitted to the CNWRA within a two-week period following the meeting.

PERIOD OF PERFORMANCE:

The period of performance shall be from August 5, 1999, until February 4, 2000.

SUPPORT FOR CONTRACTOR REQUEST

CONTRACTOR: Eileen Johnson, Ph.D.

RATE (dollars/hour):

PERIOD OF PERFORMANCE: July 30, 1999–December 31, 1999

STATEMENT OF WORK: See Attached

ESTIMATED UTILIZATION (hours): 300

PRIOR CONTRACTOR WORK EXPERIENCE WITH SWRI:
None

PROGRAMMATIC NEED FOR CONTRACTOR WORK:

The U.S. Department of Energy Draft Environmental Impact Statement is a key document in the NRC high-level radioactive waste disposal program. The NRC has a legal mandate to review it. The CNWRA has been tasked to support this review, including obtaining consultant support for the review of those sections of the document that are outside its areas of technical expertise.

LIST OF ELIGIBLE CONSULTANTS CONSIDERED:

L. Canter, Ph.D.
S. Atkinson, Ph.D.
T. Mollahagan, Ph.D.
L. Urban, Ph.D.
(Others are also being evaluated)

RATIONALE FOR SOLE/SINGLE SOURCE SELECTION:

NA—Multiple consultants will be used for the review, including individuals from the list above.

RATIONALE FOR NOT USING SWRI RESOURCES:

SwRI does not have staff with expertise in review of the socioeconomic, environmental justice, cultural, ecological, environmental, or transportation impacts addressed in environmental impact statements.

PROJECT NUMBER(S):

20-1402-761