

November 22, 2016

Mr. Ron Josephson  
National Center for Environmental Research  
Office of Research and Development  
U.S. Environmental Protection Agency  
William Jefferson Clinton Building  
1200 Pennsylvania Ave., N. W.  
Mail Code: 3903R  
Washington, DC 20460

Subject: LETTER OF REFERENCE FOR PARTICIPATION IN A RESPONSE TO THE  
ENVIRONMENTAL PROTECTION AGENCY FUNDING OPPORTUNITY:  
EPA-G2016-ORD-D1 - OIL AND GAS DEVELOPMENT IN THE APPALACHIAN  
BASIN

Dear Mr. Josephson:

The purpose of this letter is to provide a letter of reference from the U.S. Nuclear Regulatory Commission (NRC) for its federally funded research and development center (FFRDC) to participate in a grant proposal that will be submitted in response to the subject funding opportunity announcement. The Center for Nuclear Waste Regulatory Analyses (CNWRA®), which is a part of the Geosciences and Engineering Division of the Southwest Research Institute® (SwRI®), is the FFRDC that was established in 1987 and is operated under sponsorship of the NRC.

SwRI is preparing a grant proposal that will be submitted to U.S. Environmental Protection Agency, Office of Research and Development, National Center for Environmental Research. It is NRC's understanding that CNWRA will not be competing under a competitive Federal Agency procurement. It is also NRC's understanding that the proposal team will be led by the CNWRA, and supported by researchers at Central Connecticut State University and the Institute for Sustainable Energy and the Environment at the Texas A&M University at Kingsville.

CNWRA utilized its expertise to conduct integrated modeling of complex systems involving geologic media and operational facilities to assess contaminant release and migration for the NRC. Models developed and used by CNWRA, such as for radioactive materials release, environmental transport, and health effects were successfully utilized by the NRC as part of its work. Consistent with Federal Acquisition Regulation requirements for an FFRDC to work for organizations other than its sponsor, system-level modelling is within the areas of special competency of CNWRA and has been utilized to support important NRC activities.

R. Josephson

- 2 -

As the Deputy Director for the Division of Spent Fuel Management and the Program Manager for the NRC CNWRA FFRDC, I have overall responsibility for overseeing the ongoing operation of the FFRDC at CNWRA for the Office of Nuclear Material Safety and Safeguards. Please feel free to contact me at 301-415-9956 or at [Anthony.Hsia@nrc.gov](mailto:Anthony.Hsia@nrc.gov).

Sincerely,

**/RA/**

Anthony Hsia, Deputy Director  
Division of Spent Fuel Management  
Office of Nuclear Material Safety  
and Safeguards

cc: Sharlene McCubbin, NRC  
Robin Baum, NRC  
Mark Lombard, NRC

R. Josephson

- 2 -

As the Deputy Director for the Division of Spent Fuel Management and the Program Manager for the NRC CNWRA FFRDC, I have overall responsibility for overseeing the ongoing operation of the FFRDC at CNWRA for the Office of Nuclear Material Safety and Safeguards. Please feel free to contact me at 301-415-9956 or at Anthony.Hsia@nrc.gov.

Sincerely,

**/RA/**

Anthony Hsia, Deputy Director  
Division of Spent Fuel Management  
Office of Nuclear Material Safety  
and Safeguards

cc: Sharlene McCubbin, NRC  
Robin Baum, NRC  
Mark Lombard, NRC

**ADAMS Accession No.: ML16327A172**

<b>OFC</b>	ADM/AMD/OBB	OGC	NMSS/DSFM	NMSS/DSFM
<b>NAME</b>	SMcCubbin via e-mail	RBaum via e-mail	MLombard	AHsia
<b>DATE</b>	11/22/16	11/22/16	11/22/16	11/22/16

**OFFICIAL RECORD COPY**