

STATEMENT OF WORK  
FOR ALKA JAIN

July 2000

Work for Alka Jain will consist of experimental investigation of radionuclide sorption onto alluvium minerals and molecular dynamics simulation of radionuclide sorption related to the Radionuclide Transport KTI.

Specific activities are anticipated to include:

- (i) conduct experiments on radionuclide (neptunium, technetium, plutonium) sorption and coprecipitation
- (ii) review available literature on molecular simulations of sorption processes
- (iii) conduct model verification by simulating uranium(6+) sorption on quartz and other minerals and comparing with literature or previous CNWRA results
- (iv) expand the study to include simulation of the sorption of neptunium and other actinides
- (v) prepare reports and other publications to document the results of the work

Additional activities may be identified in the future.

## 2003 STATEMENT OF WORK FOR AJ SCIENCE SOLUTIONS SUBCONTRACT

Work under this subcontract will include conducting laboratory experiments, chemical and materials analyses, and related evaluations. This work will require that the consultant perform the following tasks.

1. Develop appropriate procedures with assistance from the PI.
2. Follow procedures and maintain records in accordance with CNWRA QA protocols.
3. Process requests for supplies and experimental equipment through the PI.
4. Be responsible for glassware cleaning and upkeep, including lab cleanliness associated with experiments.
5. Be familiar with and follow general safety and radiation safety protocols and procedures.

Additional activities may be identified in the future.