



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

FEB 18 2002

MANDEX, Inc.  
Attn: Kevin M. Couch  
Dir. of Administration  
12500 Fair Lakes Circle, Suite 160  
Fairfax, VA 22033-3804

SUBJECT: TASK ORDER NO. 5 ENTITLED, "SUPPORT DWM GIS AND 3D MODELING EFFORTS RELATED TO THE PROPOSED WASTE REPOSITORY AT YUCCA MOUNTAIN, NEVADA", UNDER CONTRACT NO. NRC-02-00-008

Dear Mr. Couch:

In accordance with Section G.5 entitled, "Task Order Procedures" of the subject contract, this letter definitizes Task Order No. 5. The effort shall be performed in accordance with the enclosed Statement of Work.

Task Order No. 5 shall be in effect from February 18, 2002 through November 15, 2002, with a ceiling of \$246,646.00. The amount of \$227,114.00 represents the total estimated reimbursable costs for the services to be performed as stated in the enclosed Statement of Work. The amount of \$19,532.00 represents the total fixed fee.

The amount presently obligated with respect to this task order is \$165,000.00 of which \$151,934.00 represents the total estimated reimbursable costs and the amount of \$13,066.00 represents the fixed fee. This obligated amount may be unilaterally increased from time to time by the Contracting Officer by written modification to this task order. The obligated amount shall, at not time, exceed the task order ceiling. When and if the amount(s) paid and payable to the Contractor hereunder shall equal the obligated amount, the Contractor shall not be obligated to continue performance of the work unless and until the Contracting Officer shall increase the amount obligated with respect to this task order. Any work undertaken by the Contractor in excess of the obligated amount specified above is done so at the Contractor' sole risk. The Contractor shall comply with the provisions of 52.232-22 - Limitation of Funds for this incrementally funded task order.

Accounting Data for Task Order No. 5 is as follows:

APPN No.:	31X0200
B&R No.:	25015301164
FIN No.:	J5392
OBLIGATED AMOUNT:	\$165,000.00
FFS COMMITMENT NO.:	5002R042
BOC CODE:	252A

Issuance of this task order does not amend any terms or conditions of the subject contract.

Your contacts during the course of this task order are:

Technical Matters: James Thomas  
Project Officer  
(301) 415-5168

Contractual Matters: Sharlene McCubbin  
Contract Specialist  
(301) 415-6565

Please indicate your acceptance of this Task Order No. 5 by having an official, authorized to bind your organization, execute three copies of this document in the space provided and return two copies to the Contract Administrator. You should retain the third copy for your records.

If you have any questions regarding this matter, please contact Sharlene McCubbin, Contract Specialist, on (301) 415-6565.

Sincerely,



Mark Flynn, Contracting Officer  
IT Acquisition Management Branch  
Division of Contracts and  
Property Management  
Office of Administration

Enclosure:  
As stated

ACCEPTED:

NAME: CS Payne

TITLE: VP SPEC OPS

DATE: 2/18/02

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1. TITLE:

Support of DWM GIS and 3D Modeling Efforts Related to the Proposed High Level Waste Repository at Yucca Mountain, Nevada

2. SCOPE OF WORK

This Task shall involve interaction with personnel from DOE, CNWRA, and DWM staff for the development of GIS and 3D Models of the area beneath and around Yucca Mountain, NV - the site of the proposed geologic repository for the disposal of High Level Radioactive Waste. This will be a continuing multi-year effort designed to accomplish the items listed below:

Subtask 2.1: Maintain Databases of Models: Provide continuous support to the CRADAL Manager and DWM staff to store the various GIS and 3D models developed for Yucca Mountain in a system format that assures data integrity and ease of retrieval. Contractor personnel shall assure that all models are appropriately labeled as to source, time of development and coverage. Contractor personnel shall also routinely work with System Administrator of CRADAL to assure that original copies of models and software being used and system backups are secured in the CRADAL safe to provide disaster recovery should data be compromised during use.

Subtask 2.2 Review of Models Developed by DOE and CNWRA: The contractor shall provide expertise to DWM staff for the review of all GIS and 3D models developed by CNWRA, DOE or DOE contractors pertaining to the Yucca Mountain, NV area. These reviews shall be performed on an "as needed" basis and shall, at a minimum, consider the quality of the data used in the development of the model as well as an expert assessment of the viability and limits of the model. Results shall be reflected in monthly reports, informal reports to select members of the DWM staff, and presentations to DWM staff.

Subtask 2.3 Model Development: At the request of the CRADAL Manager, the contractor shall develop GIS and 3D models using ArcInfo, ArcView, ERDAS, and Earthvision to support DWM staff in the review of material and data submitted to the NRC concerning the geology and hydrology of Yucca Mountain. This task may involve travel, as approved by the Project Officer, to assess field data prior to such data being used to develop any models.

Subtask 2.4 Staff Training: The contractor shall provide expert resources to members of the DWM staff, as needed, to assist them in using any of the GIS and 3D models developed and/or maintained in CRADAL. Such effort may include one on one assistance in the use of any of the models or presentations to several staff members.

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Subtask 2.5 Maintaining Level of Expertise: The contractor shall arrange for the scheduling of continuing education classes in Earthvision, ArcInfo, Arcview, or ERDAS, as appropriate, to maintain the skill levels of contractor personnel assigned to work on modeling efforts related to High Level Waste.

Subtask 2.6 Purchase of IT Equipment: As directed by the Contract Officer, the contractor shall arrange for the purchase of hardware, software, or IT support of CRADAL efforts related to High Level Waste. If any of the items requested are available for purchase off the GSA schedule, the contractor need only provide a single source for the product/service, its price, and expected time for delivery following placement of the order. If the item is not on the GSA schedule, the contractor must provide three independent quotes for the item/service along with estimated delivery schedules. Items shall not be purchased until the quotes have been reviewed by the NRC and the actual purchase is authorized by the Contract Officer

3. DELIVERABLES:

Subtask 2.2 Review of Models Developed by DOE and CNWRA: The contractor shall conduct a review of each model submitted by DOE and CNWRA within 90 days of receipt of model. No later than 10 days following the completion of review, the contractor shall deliver a final report on the model reviewed which shall include a discussion on the limits and viability of the model.

Subtask 2.3 Development of Models: The contractor shall complete each model development task within 120 days of the original assignment, unless an alternate schedule has been approved in writing by the Project Officer. No later than 20 days following the completion of any model being developed, the contractor shall deliver a final report describing in detail the model that was developed, the assumptions used, the limitations on use, and recommendations for future work.

Subtask 2.5 Maintaining Level of Expertise: Within 60 days from the date of this Task Order No. 001, the contractor will develop and submit to the NRC Project Officer for approval, a training plan for all contractor staff engaged in High Level Waste modeling which is designed to develop journeyman personnel and keep senior personnel abreast with the latest developments in GIS and 3D modeling software used in CRADAL. The NRC Project Officer will provide comments on or approval of this training plan to the contractor within one (1) week of receipt. Should corrections or clarifications be required, the contractor will resubmit this plan accordingly, within one (1) week from receipt of the NRC Project Officer's comments. All deliverables shall be submitted in accordance with Subsection F.2 - DELIVERY FORMAT of the basic contract.

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Efforts in this areas shall include plans to attend formal training sessions given by the software vendors for the products used in CRADAL and attending conferences where other users are reporting on experiences with ArcInfo, Arcview, ERDAS, and Earthvision which are applicable to CRADAL High Level Waste modeling efforts.

4. REPORTING REQUIREMENTS:

The contractor shall report on all such efforts monthly. All reports shall be submitted in accordance with Subsection F.6 - 2052.212-71 TECHNICAL PROGRESS REPORTS of the basic contract.

5. TRAINING REQUIREMENT:

This requirement shall be accomplished in accordance with Subsection C.5 - TRAINING REQUIREMENTS of the basic contract.

6. TRAVEL:

It is estimated that four person trips will be required to Las Vegas, NV for recovery of field data and/or to participate in meetings with DOE and CNWRA and two person trips will be required to Aneheim, CA to take annual software refresher courses. All travel required by this task order shall be proposed for and made in accordance with Subsection G.2 - 2052.215-82 TRAVEL REIMBURSEMENT - ALTERNATE I of the basic contract.

7. PERIOD OF PERFORMANCE:

The period of performance of this task order shall be from date of award through November 15, 2002.

8. TASK ORDER LEADER:

The Task Leader for this task order will be the NRC Project Officer under the basic contract, Mr. James Thomas. He can be reached at (301) 415-5168.