UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

September 12, 2002

Wesley C. Patrick, President
Center for Nuclear Waste
Regulatory Analyses
6220 Culebra Road
PO Drawer 28510
San Antonio, TX 78228-0510

Subject: Task Order No. 11 Entitled, "Application for Alternate Concentration Levels for Uranium Mill Tailings Sites", Under Contract NRC-02-98-002

Dear Dr. Patrick:

In accordance with the task order procedures of the subject contract, this letter definitizes Task Order No. 11. This effort shall be performed in accordance with the enclosed Statement of Work, and the Contractor's technical proposal dated September 3, 2002. Task Order No. 11 shall be in effect from September 23, 2002, through March 22, 2003 with a cost ceiling of $125,280. The amount of $113,529 represents the total estimated reimbursable costs, the amount of $2,669 represents the cost of facility capital, and the amount of $9,082 represents the fixed fee for this task order.

The amount obligated on this task order document is $113,036. Of this amount $104,663 represents estimated costs and $8,373 represents the fixed fee. It is estimated that this will fund the task order through February 28, 2003.

Accounting Data for Task Order No. 11 is as follows:

B&R No.: 25015201220
JC No.: J5220
BOC: 252A
Appn. No.: 31X0200.260
Obligated: $113,036

The following individuals are considered to be essential to the successful performance of the work hereunder: [redacted]

The Contractor agrees that such personnel shall not be removed from the effort under the task order without compliance with Contract Clause H.1 Key Personnel.

Your contacts during the course of this task order are:

Technical Matters: Jayne Halvorsen
Project Officer
(301) 415-6001

TEMPLATE-ADM001 ADM02

Contractual Matters: Barbara Meehan
Contract Specialist
(301) 415-6730

The issuance of Task Order No. 11 does not change any terms and conditions of the subject contract.

Please indicate your acceptance of Task Order No. 11 by having an official authorized to bind your organization, execute three (3) copies of this document in the space provided and return two (2) copies to the U.S. Nuclear Regulatory Commission, Attn: Mrs. Barbara Meehan, ADM/DC/CMC1, Mail Stop T-7I2, Washington, DC 20555. You should retain the third copy for your records.

If you have any questions regarding this matter, please call me on (301) 415-6730.

Sincerely,

Barbara D. Meehan

Barbara D. Meehan, Contracting Officer
Contract Management Center No. 1
Division of Contracts
Office of Administration

Enclosure: As stated

Accepted:

Name

R.B. Kalmbach, Director, Contracts
Title

September 20, 2002
Date

TASK ORDER STATEMENT OF WORK

TASK TITLE: APPLICATION FOR ALTERNATE CONCENTRATION LEVELS FOR URANIUM MILL TAILINGS SITES

JOB CODE: J5220
DOCKET NO: 40-8905

NRC ISSUING OFFICE: NMSS

NRC TECHNICAL PROJECT MANAGER: Jill Caverly (TPM)
TECHCHNICAL ASSISTANCE PROJECT MANAGER: Jayne Halvorsen (TAPM)

1.0 BACKGROUND:

Rio Algom LLC, the current owner of the uranium mill facility at Ambrosia Lake, New Mexico, has submitted to the Nuclear Regulatory Commission (NRC) an Application for Alternate Concentration Limits (ACL) under the provisions of 10 CFR Part 40, "Domestic Licensing of Source Material". The application requests that the NRC approve new limits for groundwater constituents. A groundwater Corrective Action Plan (CAP), conducted in compliance with NRC Source Material License SUA-1473, was implemented in 1989. The purpose of the CAP was to abate milling related impacts to the groundwater by reducing the concentration of constituents of concern to groundwater protection standards (GPS) set forth in the license.

The current groundwater CAP requires groundwater and mine water pumping in the Westwater Canyon Member of the Morrison Formation. The pumped water is treated at the facility to remove constituents and discharges pursuant to State of New Mexico discharge permits. A dewatering trench is also used to intercept seepage between the evaporation pond and the tailings impoundment. The geologic features of the site are an alluvial aquifer and three bedrock aquifers. Alluvial material overlays the bedrock aquifers and consists of fine, clay-rich and sandy-rich material and is 0-100 foot thick. The CAP requires removing contaminants from water recovered in all of the aquifers.

Over the past 13 years, the CAP has reduced some constituent concentrations in the groundwater, but has not met groundwater protection standards for all constituents of concern. The licensee believes that the CAP is no longer effective at removing or containing contaminants. In light of the current conditions of the groundwater, Rio Algom has prepared an Application for Alternate Concentration Limits for both the alluvial aquifer and the three bedrock aquifers in the Westwater Canyon Member. The alluvial portion of the application asks for relief of the pumping requirement and states that reducing constituent concentrations at the point of compliance to groundwater protection standards is not technically feasible due to the ambient conditions for the alluvial aquifer. A number of sources from abandoned mine spoils and ore piles from mine and mill operations have contributed constituents to the alluvial groundwater making the portion contributed by the licensee difficult to distinguish. Additionally, the licensee argues that the current GPS are based on background conditions derived from unrealistic data. The application bases its conclusion on naturally occurring geochemical and hydrologic processes that reduce concentrations by removing constituents from groundwater along its flowpath resulting in acceptable health based risk at a point of exposure.

The rational behind ceasing the CAP for the bedrock portion of the groundwater system is based on interpretation of groundwater models and the belief that after termination of pumping, the groundwater will not recharge for hundreds of years. Because of these reasons, the licensee requests relief from the requirements of the groundwater CAP.

2.0 OBJECTIVE:

The objective of this project shall be to provide technical assistance and review of the licensing action for a uranium recovery licensee. The specific objectives of this project includes the review of an Application for Alternate Concentration limits for the alluvial aquifer and the bedrock aquifers which are currently being treated under a corrective action program. The review shall use NRC guidance to determine whether the ACL application meets NRC regulations 10 CFR Part 40, Appendix A for groundwater protection.

3.0 WORK REQUIREMENTS:

The Center for Nuclear Waste Regulatory Analysis (CNWRA) staff will use 10 CFR Part 40 and other applicable Parts of 10 CFR, applicable standard review plans; and available NRC uranium recovery policy and directive guidance. The CNWRA staff will perform a site visit, generate comments and Request for Additional Information (RAI) and perform a final detailed review of the application. Upon completing its review, CNWRA will provide an assessment to NRC staff whether the application meets the NRC requirements.

4.0 STAFFING

The principal investigator provided by the contractor should possess the technical expertise to perform a thorough and well documented review. They should have professional credentials in the technical areas assigned to them that will qualify them as experts. They should have experience in groundwater analysis and a clear understanding of the depth of review generally required by the NRC, specifically an Application for Alternate Concentration Limits.

In areas that can be reviewed by less experienced contractor personnel, the principal investigators must act to provide oversight and quality control to these task activities. The principal investigator shall provide detailed reports of the review and records of methods used to evaluate all aspect of all areas with in the licensing action. At the conclusion of the evaluation, the contractor will provide review information in a form that is suitable for inclusion into NRC reports.

6.0 SCOPE OF WORK:

The review of the Application for Alternate Concentration Levels shall evaluate the following elements to determine regulatory compliance with 10 CFR Part 40, Criterion 5B(6).

- Constituents of concern and the associated human and environmental risks of those constituent(s), including human cancer risk and environmental hazards. Characterization of the hazardous constituents source term and the extent of groundwater contamination.
- Assessment of hazardous constituent transport in the groundwater and hydraulically connected surface waters, and its adverse effects on water quality, including present and potential health and environmental consequences of exposure to the identified hazards.
- A demonstration that a hazardous constituent concentration will not pose substantial present or potential hazard to human health or the environment at the point of exposure, achievable, considering practicable corrective actions.
- Implementation of the proposed alternate concentration limit and modifications to the compliance monitoring program.

If information provided by the licensee is incomplete or inadequate, the contractor will prepare questions for submittal to the licensee to elicit any necessary data. These questions shall be submitted to the licensee by the NRC after NRC review. The contractor may also need to meet with the licensee to discuss the original or additional information. Additionally, the contractor may also visit the site for familiarization. All contacts with the licensee shall be coordinated with the NMSS TM or the Rio Algom - Ambrosia Lake project manager. The contractor shall maintain written documentation of such contacts.

7.0 ESTIMATED LEVEL OF EFFORT FOR EACH TASK

The estimated level of effort to perform this task is 0.5 FTE.

8.0 DELIVERABLES

The deliverables to be prepared under this task are (1) an initial (cursory) evaluation (2) a request for additional information (3) site visit reports (if applicable) (4) draft evaluation report, and (5) final evaluation report. These should be delivered in accordance with the following schedule, which is based on estimates of time intervals to accomplish steps in the review process. However, the overall schedule is dependent on the licensee's timely submittal of responses to NRC requests for additional information(RAI) and any outstanding concerns.

Task Start-up and coordination meetings (attend meeting at NRC)	1 weeks after task initiation
Complete initial review	3 weeks after coordination meeting
Complete Request for Additional Information (RAI) and Identify Outstanding Concerns	1 week after initial review is completed
Evaluate response to RAI	2 weeks after receiving RAI information

Complete Draft Evaluation of ACL application	5 weeks after evaluation of RAI information
NRC comments provided	15 days after receipt of draft
Complete Final evaluation of ACL application	30 days from receipt of NRC comments on Draft Evaluation

8.0 MEETINGS AND TRAVEL

It is expected that a CNWRA staff member will participate in a site visit with an estimated duration of 5 days. Additionally, CNWRA staff will travel to Washington, D.C. in order to coordinate the review process with NRC staff. It is estimated that 2 one person trips of 2 days duration may be necessary to support this activity.

9.0 PERIOD OF PERFORMANCE

The period of performance of this task shall be six months from date of task order award.

10.0 NRC-PROVIDED MATERIALS

The NRC will furnish the contractor with one copy of the Application for Alternate Concentration Limits and a copy of the report on CD-ROM and other supporting documentation and guidance. Information not readily available can be accessed by the contractor from the publicly available NRC website and the docket file for this site.

11.0 TECHNICAL/PROJECT DIRECTION

The NMSS TAPM is the focal point for all contract related activities. All work assignments and program funding actions are initiated by the NMSS TAPM who submits all requests to the Division of Contracts and Property Management (DCPM) for processing. All proposed work scope or schedule changes must be submitted through the NMSS TAPM for DCPM.

The NMSS TPM is responsible for providing technical guidance to the performing organization regarding staff interpretations of the technical aspects of regulatory requirements, along with copies of relevant documents (e.g. Standard Review Plans) when requested by the performing organization. All work products must be reviewed and approved by the NMSS TPM before they are submitted as final documents. All technical directions given to the performing organization must be consistent with the work scope and schedule. The NMSS TPM is not authorized to unilaterally make changes to the approved work scope or schedule or give the performing organization any direction that would increase costs over approved levels. The DCPM Contracting Officer is the only individual authorized to make changes to this task.