THE STATE OF WYOMING

ED HERSCHLER
GOVERNOR

Department of Environmental Quality

LAND QUALITY DIVISION

HERSCHLER BLDG. - THIRD FLOOR
122 WEST 25TH

TELEPHONE 307-777-7756

CHEYENNE, WYOMING 82002

July 8, 1986

Mr. Harry Pettengill
NRC
Uranium Recovery Field Office
Box 25325
Denver, CO 80225

RE: Addendum No. 2 to Bison Basin Bid Package

Dear Mr. Pettengill:

As promised in my July 3rd letter, enclosed are replacement pages for the bid package.

In order to bring up-to-date your original bid package, please do the following in the order given:

1) Replace original Sections C and D with revised Sections C and D sent with Addendum No. 1, sent June 4, 1986 (if you have not already done so).

2) Add "Wyoming Highway Department Wage Determination Decision - Judicial District Number IX", sent to you with Addendum No. 1, to the end of Section H.

3) Then remove -

Section A, pp. 1, 2 and 3
Section B, pp. 1, 2, 3, 4, 5 and 6
Section C, pp. 2 and 7
Section G, pp. 7, 11 and 14
Section H, pp. 3, 4 and 5
Section I, pp. 3, 4, 5, 5B, 6, 7, 8, 9, 10, 11, 12, 13

and replace with the pages enclosed with this letter.

By doing the above, your bid document will be current through all changes made through Addendums 1 and 2.

As a final note, my letter of July 3, 1986 indicated I would be sending a document that outlined the difference between professional and nonprofessional employees (exempt/nonexempt). I am unable to do this because the document we have applies only to government employees. If you need help in determining the difference, I would contact the Wyoming Labor Commissioner.

Should you have any questions, please feel free to call.

Sincerely,

Roger Shaffer
Administrator

RS:RE:klr

Enclosure

cc: Rick Chancellor
Mark Moxley
Jim Uzzell

SECTION A

CALL FOR BIDS
BID NO.

Notice is hereby given that the State of Wyoming, Department of Environmental Quality, Land Quality Division, Cheyenne, Wyoming, Owner, hereby calls for bids for a general contract for the restoration, decommissioning and reclamation of the former Ogle Petroleum - Bison Basin in situ uranium mine. The Bison Basin mine is located 28 miles south of Sweetwater Station in southern Fremont County.

The overall purpose of the project is to accomplish complete reclamation of the mine site. Phase I of the project will consist of the groundwater restoration and monitoring. Phase II will consist of the final decontamination, decommissioning, and abandonment of the wellfield, evaporation ponds and plant facilities, and the surface reclamation of all disturbed ground. All bids are required to consider both phases of the project. However, all prospective bidders are advised that the State may be unable to or may decide not to award a contract for Phase II at the time the contract is awarded for Phase I. Accordingly, the bidders will need to indicate an outside date to which they are willing to hold their bids open for Phase II.

Sealed bids will be received until 2:00 p.m. on the 15th day of July, 1986 at the Office of the Purchasing Administrator, Room 301, Emerson Building, Cheyenne, WY 82002.

A certified check or bid bond in the sum of ten percent (10%) of any bid for Phase I and if the bidder also chooses to bid on Phase II, also for Phase II, must be filed with said bid, to be forfeited to the State of Wyoming as liquidated damages if the bidder is awarded the contract and fails to enter into a contract with the Owner within ten (10) days after Notification of Award. The bid bonds will be returned to the bidder as soon as a contract is executed, immediately if all bids are rejected, or within 30 days, whichever comes first.

No performance or payment bonds will be required for Phase I of the project. If a contract is signed which includes Phase II of the project, the successful bidder must furnish performance and payment bonds guaranteeing the faithful performance of Phase II of the Contract and the payment of labor and materials thereunder. Said bonds are to be in the sum of one hundred percent (100%) of the Phase II contract price and in substance, form and execution as shall be approved by the State of Wyoming Attorney General's Office. Phase II performance and payment bonds must be furnished just prior to commencement of Phase II work.

A Bidder's tour of the Project will be convened at 9:00 a.m. on May 29, 1986 at the mine site.

The purpose of the tour is to familiarize all bidders with the facilities and aspects of the project and to allow prospective bidders to ask questions concerning the work. The bidder's tour, however, does not relieve bidders from the responsibility of familiarizing and informing themselves of the extent and character of the work as required by the contract documents.

Firms wishing to bid on this project must be prequalified with the Wyoming Department of Environmental Quality, Land Quality Division. Any firm which has not been prequalified on or before 5/19/86 shall be automatically disqualified. Firms must be prequalified in the areas of in situ uranium mining, groundwater hydrology, project management, groundwater restoration, radiation safety, radiological surveys, uranium mill decommissioning, decontamination procedures, transportation of radioactive materials, water sampling, report preparation, and land reclamation.

Job specific statement of qualifications should be no longer than 25 pages. Firms must present complete resumes for the firm itself and for all key people to be involved in the project including the project manager, on-site project superintendent and radiation safety officer. All substantial subcontractors, over 10% of the job, must be listed along with their qualifications. References should be given for all firms and key people.

All bids shall be opened and read by the State of Wyoming, Department of Administration and Fiscal Control, Purchasing Division, on the 15th day of July 1986, at 2:00 p.m. at the office of the Purchasing Administrator, Room 301, Emerson Building, Cheyenne, Wyoming 82002. The contract, if awarded for part or all of the project, shall be awarded to the bidder who, in the opinion of the owner, can best accomplish reclamation of the mine, considering the method to be employed, the prospects for complete groundwater restoration, safety in the handling and disposal of radioactive materials, cost to the public, and other factors deemed to be of importance to the owner. The owner reserves the right to reject any bid submitted without the "Performance Capabilities" being fully and clearly set forth as required by item B-1F of the bid document.

The State of Wyoming shall have the right to request additional information from any bidder and to reject any and all bids or waive any informality in same. No bidder will be allowed to withdraw his bid for a period of thirty (30) days or until the successful bidder has entered into a contract with the State of Wyoming.

The State of Wyoming hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, sex, age, color or national origin in consideration for an award.

Plans are available for public review at these locations:

State of Wyoming
Department of Administration and Fiscal Control
Division of Purchasing and Property Control
Room 301, Emerson Building
Cheyenne, Wyoming 82002

State of Wyoming
Department of Environmental Quality
Land Quality Division
Herschler Building - Third Floor
122 West 25th Street
Cheyenne, WY 82002

State of Wyoming
Department of Environmental Quality
Land Quality Division
210 Lincoln Street
Lander, WY 82520

Plans, specifications and proposal blanks may be obtained from the following location:

State of Wyoming
Department of Environmental Quality
Land Quality Division
Herschler Building - Third Floor
122 West 25th Street
Cheyenne, WY 82002

SECTION B

SECTION B

INSTRUCTIONS TO BIDDERS

B-1A - INVESTIGATION

Bidders shall familiarize themselves with the Plans, Specifications, and Contract Forms contained in this bid package and shall make a personal investigation at the site of the proposed work. They shall make their own estimates as to the facilities, equipment, difficulties, hazards, subsurface conditions, character of materials and costs affecting the construction of the proposed work.

B-1B - QUANTITIES

The OWNER'S estimate of quantities appearing in the Proposal are approximate only and are intended to serve as a guide to Bidders preparing their bids. The Contractor shall not at any time make claim for additional payments or consideration because of a misunderstanding regarding the nature or amount of work to be done.

B-1C - FORMS

The bid proposal and all forms shall be submitted in triplicate and no alterations are to be made to the Proposal, Contract Bond, and Contract Agreement forms supplied by the Owner unless otherwise approved by the Engineer.

B-1D - BID SECURITY

Each proposal must be accompanied by a bid deposit in the amount of Ten Percent (10%) of the total bid for Phase I, and if the bidder chooses to bid on Phase II, also for Phase II, which shall be in the form of a cashier's check, certified check, bank money order drawn on a reliable bank and made payable to the State of Wyoming or a bid bond.

A bid deposit in the amount of Ten Percent (10%) of the total bid shall be given as a guarantee that the bidder will execute the Contract Documents, if the contract is awarded to him. All deposits will be returned to the bidders whose proposals they accompany as soon as the successful bidder is determined and a contract is executed with that bidder. In the event that the successful bidder decides not to accept the contract, the State

reserves the option to deal with any other bidder who may accept the work.

B-1E - CONTRACT BONDS

The Contractor for Phase II shall be required to furnish Performance and Payment Bonds in the amount of One Hundred Percent (100%) of the Contract Price for Phase II as security for the faithful performance of the Contract and the payment of all persons furnishing labor and materials in connection therewith.

B-1F - PERFORMANCE CAPABILITIES

Each BIDDER shall provide written evidence of his capability to perform the work called for in the contract. This evidence shall include the following:

1. A detailed description of the proposed plan(s) of operation and time schedule.

2. A detailed equipment list containing descriptions of major equipment currently owned by the BIDDER that will be used for this project, indicating for each the make, type, date of manufacture, and capability. For each piece of major equipment, there must be a certification that it is in good running condition and state of repair.

3. Description and schematic drawings of any major piece of equipment that it is proposed to construct for the performance of the work.

4. In the event that the BIDDER proposes to lease or otherwise acquire major equipment for the performance of this contract prior to the start of the contract, the BIDDER will additionally furnish for each such piece of equipment, details of the nature of the proposed acquisition, the proposed source of the equipment, the committed lead time for the supply of the equipment, and will provide as part of his bid, documentation from the proposed supplier of the equipment committing the availability of the equipment.

5. In the event that the BIDDER proposes to build or have built to his specification equipment for the performance of the contract, the BIDDER will additionally furnish details of: the proposed equipment; the method of construction; the organization that will construct the proposed construction (if not the BIDDER); and the experience of the construction organization in the construction of equipment of the same or essentially similar size and function.

6. Description of the proposed manpower utilization and organization for the contract.

It should be noted that the OWNER reserves the right to make such additional investigations as it deems necessary to determine the ability of the BIDDER to perform the work and the BIDDER shall furnish to the OWNER all such information and data for this purpose as the OWNER may request.

B-1G - LIST OF SUBCONTRACTORS

The prime Contractor shall attach to his Bid Proposal a list of all Subcontractors and the dollar amount of work that said Subcontractors will perform under this contract, if the Subcontractors are being utilized to meet the requirements of Section B-1F.

B-1H - STYLE OF SOLICITATION

The Bison Basin Decommissioning Project consists of two separate phases as described in the specifications. Due to the limited funds presently available the project will be bid separately. Phase I must bid for the approved restoration plan outlined in Permit 504 (groundwater sweep, with clean water recycle from a reverse osmosis unit), plus any alternate(s) the Bidder desires. Phase II will be bid under three different options. Should the bidder wish to bid on Phase II he must bid on all three options.

The Wyoming Department of Environmental Quality - Land Quality Division will award the contract, if such award is made, in the manner considered to be in the best interest of the State. See B-1J below for Department options in awarding a contract.

B-1I - CONTRACT TIME

The Contractor shall commence work on or before the date specified in the Notice to Proceed. All groundwater restoration operations, to achieve the specified target values or a maximum of six (6) pore volumes of water treated and circulated, shall be completed within sixteen (16) months unless otherwise extended by the OWNER by change order. If Phase II is awarded, it shall be completed within twenty four (24) months of the date specified in the Notice to Proceed, unless otherwise extended by the OWNER.

B-1J - RIGHT TO ACCEPT AND REJECT BIDS

The State of Wyoming reserves the unqualified right, in its sole and absolute discretion, to do anyone of the following:

- reject any and all bids
- award a contract for Phase I only
- award a contract for both Phases I and II

Under all circumstances the State decision will be made in a manner which in its sole and absolute judgement, will best serve the public interest.

In the event that the successful bidder fails to execute the Contract Agreement and/or fails to furnish the Contract Bonds, the State, after declaring forfeited the Bid Security of such bidder, reserves the option to accept the bid of any other bidder within ten (10) days of such default, in which case such acceptance shall have the same effect as to such bidder as though he were the original successful bidder.

No bidder will be allowed to withdraw his bid within a period of thirty (30) days of the Bid Opening.

B-1K - VALUE INCENTIVE CLAUSE

A policy exists allowing Contractors, after award of a contract, to submit a Value Change Proposal (VCP) for consideration by the State.

VCP's contemplated are those that would result in net cost savings to the State by combining, reducing, or eliminating required functions as being non-essential or excessive to the satisfactory performance of the work involved without impairing any required functions such as service life, reliability, economy of operation, level of operational performance, ease of maintenance, or safety features originally required by the Contract.

If a VCP is accepted and results in a net reduction in the contract price, the contractor will share equally with the State in the savings. Requirements for submission of a VCP are available upon request to the OWNER.

B-1L - APPROVAL FOR USE OF PUBLIC ROADS

The CONTRACTOR shall provide to the OWNER, prior to notice to proceed, written approvals from the appropriate government agency for utilization of the public roads for this construction contract, including usage by sub-contractors. Bidders are referred to Section H-1Q of the contract.

B-1M - RESIDENT CONTRACTOR PREFERRED

"The contract shall be let to the responsible resident making the lowest bid if such resident's bid is not more than five percent (5%) higher than that of the lowest responsible non-resident bidder." (16-1-101, et.seq.).

B-1N - USE OF WYOMING LABORERS

Wyoming laborers shall be employed exclusively under this contract, provided, that non-resident laborers may be used when Wyoming laborers, are not available for such employment from within the State, or are not quali-

fied to perform the work involved. The Contractor shall inform the State Employment Office nearest the construction site.

B-10 - LEASE AGREEMENT FOR USE OF ON-SITE FACILITIES AND EQUIPMENT

By way of a separate agreement, the OWNER will lease, at no cost to the CONTRACTOR, all the facilities and equipment as listed in the inventory attached to the Specifications Section of this bid package. This lease agreement shall be executed after a CONTRACTOR is selected. The agreement shall cover the maintenance and insurance which the CONTRACTOR shall provide to adequately protect the State's interest in the property.

B-1Q - BID ALTERNATIVES AND OPTIONS

Bids are being requested for Phase I, Groundwater Restoration and Monitoring and Phase II, Site Decommissioning and Reclamation, however, the bidder is not required to bid on Phase II.

Phase I will consist of groundwater restoration using groundwater sweep/clean water recycle from a reverse osmosis unit and/or an alternate treatment plan proposed by the bidder. Any alternate plan must be approved by the OWNER.

Phase II will consist of three (3) options.

Option A. shall be bid with the CONTRACTOR receiving sale/salvage rights to all facilities and equipment.

Option B. shall be bid with the CONTRACTOR receiving sale/salvage rights to all significantly contaminated equipment and facilities and also including the Process Plant/Shop/Warehouse/Mine Office Building.

Option C. shall be bid with the CONTRACTOR receiving no sale/salvage rights to any equipment or facilities.

B-1R - SUBMISSION OF BIDS

All bids will be delivered to:

Office of Purchasing Administrator
Room 301, Emerson Building
Cheyenne, Wyoming 82002

prior to 2:00 P.M. on the 15th day of July, 1986 in a sealed envelope marked on the outside as follows:

BID: BISON BASIN DECOMMISSIONING PROJECT

CONTRACTOR: _____
Name

_____

_____
Address

_____
Telephone Number

SECTION C

Phase I

ITEM NO.	APPROXIMATE QUANTITIES	ITEM	GROUNDWATER SWEEP CLEAN WATER RECYCLE (R.O.) AMOUNT DOLLAR/CENTS	ALTERNATE AMOUNT DOLLAR/CENTS
1.	Lump	Mobilization, Bonding, Insurance, Furnish Water Treatment Plant (not to exceed 25% of total bid for Phase I)	_____	_____
2.	Lump	Install and Demo of Water Treatment System (not to exceed 20% of total bid for Phase I)	_____	_____
3.	Lump	Groundwater Restoration (to achieve target levels or a maximum of 6 pore volumes treated)	_____	_____
4.	Lump	Groundwater Stabilization Monitoring	_____	_____
5.	Lump	Equipment and Facilities Maintenance, Replacement Parts and Equipment	_____	_____
6.	Lump	Site Security	_____	_____

BID SCHEDULE - CONTRACT NO. ____

All items listed below must be submitted with the bid proposal. Bids which do not include these items may be considered unresponsive and may be rejected.

	Items	Specifications Section
I	Signed Bid Proposal	C
II	Bid Security	B-1D
III	Information on Bidder's Performance Capabilities	B-1F
IV	List of Subcontractors (where applicable)	B-1G

Respectfully submitted:

_____ _____
Signature Address

_____ _____
Title Date

_____
License No. (if applicable)

SEAL - If Bid is by Corporation
(not required if signed above by Corporate President)

Attest _____

SECTION G

Substantial Completion - The date as certified by OWNER when the construction of the Project or a specified part thereof is sufficiently completed, in accordance with the Contract Documents, so that the Project or specified part can be utilized for the purposes for which it was intended; or if there be no such certification, the date when final payment is due in accordance with Section G-1N-9, "Approval of Final Payment", paragraph one.

Work - Any and all obligations, duties and responsibilities necessary to the successful completion of the Project assigned to or undertaken by CONTRACTOR under the Contract Documents, including all labor, materials, equipment and other incidentals and the furnishing thereof.

G-1B - PRELIMINARY MATTERS

1. Execution of Agreement:

At least four counterparts of the Agreement and such other Contract Documents as practicable will be delivered by OWNER to CONTRACTOR within ten (10) days of the Notice of Award and OWNER will execute and deliver one counterpart to CONTRACTOR within ten (10) days of receipt of the executed Agreement from CONTRACTOR. OWNER and CONTRACTOR shall each receive an executed counterpart of the Contract Documents and additional conformed copies as required.

2. Delivery of Bonds:

When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as he may be required to furnish in accordance with Section G-1E-5, "Performance, Payment and Other Bonds", paragraph one.

3. Copies of Documents:

OWNER shall furnish to CONTRACTOR up to three copies of the Contract Documents as are reasonably necessary for the execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction.

4. Contractor's Pre-Start Representations:

CONTRACTOR represents that he has familiarized himself with, and assumes full responsibility for having familiarized himself with, the nature and extent of the Contract Documents, Work, locality, and with all local conditions and federal, state and local laws, ordinances, rules and regulations that may in any manner affect performance of the Work, and represents that he has correlated his study and observations with the requirements of the Contract Documents. CONTRACTOR also represents that he has studied all surveys and investigation reports of subsurface and latent physical conditions referred to in the Special Conditions of the Specifications and made such additional surveys and investigations as he deems necessary for the

CONTRACTOR shall take out and furnish to OWNER and maintain during the life of this contract, complete Owner's Protective Liability Insurance in amounts specified in paragraph 2-a and 2-b above for Bodily Injury and Property Damage Liability Insurance.

4. Builder's Risk Insurance:

CONTRACTOR shall purchase and maintain Builder's Risk Insurance in the amount of 100% of the amount to erect structures where applicable, protecting OWNER and holding OWNER harmless against claims which may arise from operations under this contract. This policy shall specifically permit partial or beneficial occupancy prior to completion or acceptance of the entire work.

5. Performance, Payment and Other Bonds

CONTRACTOR shall furnish performance and payment Bonds to OWNER as security for the faithful performance and payment of all his obligations under the Contract Documents. These Bonds shall be in amounts equal to the Contract Price and shall be delivered to OWNER within ten (10) calendar days after Notice of Award, in such form and within such sureties as are licensed to conduct business in the State of Wyoming. The Bonds may be submitted on standard bonding forms provided by the bonding agency and signed by a duly appointed resident agent authorized to do business in the State of Wyoming. Bonds shall meet all legal requirements as to form and execution. Performance and payment bonds shall not be required for Phase I of the project, however, they will be required for Phase II.

If, during the Contract Time, Change Orders increase the original Contract Price, CONTRACTOR shall furnish OWNER additional bonding coverage so that 100% of the Contract Price is always provided. (W.S. 9-2-1016)(b)(xiv)(C).

If the surety on any Bond furnished by CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated or revoked in any state where any part of the Project is located, CONTRACTOR shall within five (5) days thereafter substitute another Bond and surety, both of which shall be acceptable to OWNER.

6. Employment Security Commission Registration:

CONTRACTOR shall furnish to OWNER within ten (10) calendar days a copy of form WYO-3 (Official Notice of Unemployment Insurance Coverage) which is obtained from the Wyoming Employment Security Commission in Casper, Wyoming.

G-1F - CONTRACTOR'S RESPONSIBILITIES

1. Supervision and Superintendence:

CONTRACTOR shall supervise and direct the Work efficiently and with professional skill and attention. He shall be solely responsible for the means,

All Work performed for CONTRACTOR by a Subcontractor shall be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor which shall contain provisions that waive all rights and contracting parties may have against one another for damages caused by fire or other perils covered by insurance provided in accordance with Section G-1E-2(b), "Property Damage Liability Insurance". CONTRACTOR shall pay each Subcontractor a just share of any insurance monies received by CONTRACTOR under Section G-1E-2(b).

5. Patent Fees and Royalties:

CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of OWNER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents. CONTRACTOR shall indemnify and hold harmless OWNER and anyone directly or indirectly employed by them from and against all claims, damages, losses and expenses (including attorneys' fees) arising out of any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product or device not specified in the Contract Documents, and shall defend all such claims in connection with any alleged infringement of such rights. The CONTRACTOR shall be responsible for the payment of all mineral royalties that are due based on mineral production associated with the project. The CONTRACTOR shall furnish the OWNER with copies of his royalty payment(s) and receipt(s) from the royalty holders for any such payments.

6. Permits and Licenses:

CONTRACTOR shall obtain and pay for all construction permits and licenses and shall pay all governmental charges and inspection fees necessary for the prosecution of the Work, which are applicable at the time of his Bid. OWNER shall assist CONTRACTOR, when necessary, in obtaining such permits and licenses. CONTRACTOR shall also pay all public utility charges and give all notices necessary and incidental to the lawful prosecution of the Work.

7. Laws and Regulations:

CONTRACTOR shall keep fully informed on all Federal and State laws, all local bylaws, regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority which in any manner affect those engaged or employed on the Work, or which in any way affect the conduct of the Work. CONTRACTOR shall at all times observe and comply with all such laws, bylaws, ordinances, regulations, orders and decrees in force at the time of award. CONTRACTOR shall protect and indemnify the OWNER and its representatives against any claim or liability arising from or based on the violation of any such law, bylaw, ordinance, regulation, order or decree whether by himself or his employees.

SECTION H

SECTION H

SPECIAL PROVISIONS

H-1A - SURVEYS, LINES AND GRADES

Any stake, point, benchmark, or monument disturbed or destroyed by the CONTRACTOR, Subcontractors, or employees of either, will be replaced at the expense of the CONTRACTOR.

H-1B - RESPONSIBILITY REGARDING EXISTING UTILITIES AND STRUCTURES

The CONTRACTOR shall be held responsible for any damage to, and for the maintenance and protection of, existing utilities and structures and shall notify the utility companies prior to any excavation.

H-1C - MEASUREMENT OF QUANTITIES

OWNER will determine the actual quantities and classification of unit price work provided by CONTRACTOR. OWNER will review with CONTRACTOR preliminary determination on such matters before rendering a written decision to CONTRACTOR.

H-1D - CONTRACT TIME

See Section D.

H-1E - CONTRACT BONDS

The CONTRACTOR shall furnish Contract Bonds, in duplicate, in the full amount of the Contract Price for Phase II as security for the faithful performance of this Contract and for payment of all labor, materials, transportation and any other costs necessary for the execution of this Contract.

If at any time during the execution of this Contract the Surety or the Contract Bonds become irresponsible, the OWNER shall have the right to require additional and sufficient sureties which the CONTRACTOR shall furnish within ten (10) days after written notice from the OWNER.

H-1F - LIQUIDATED DAMAGES

Liquidated damages for delay will be assessed against the CONTRACTOR in the amount of $1,000 per calendar day for failure to complete the work within the specified time.

H-1G - PAYMENTS TO THE CONTRACTOR

Payment will be made by the OWNER to the CONTRACTOR upon completion of each item on the bid schedule or according to an alternate pay schedule which the CONTRACTOR may propose subject to the approval of the OWNER. CONTRACTOR shall prepare an Application for Payment itemizing work completed by units bid, which shall be submitted to the OWNER. Payment will be made by the OWNER for ninety percent (90%) of the work completed, ten percent (10%) being held until final acceptance.

All payments due the CONTRACTOR for extra work in accordance with these Specifications will be included in his monthly Application for Payment as detailed in the paragraph above.

H-1H - WARRANTY

The CONTRACTOR shall warrant that his work is free from defects and substandard workmanship for a period of one year from date of acceptance of any portion of the Contract, which acceptance shall be in writing by the OWNER.

H-1I - DISCONTINUANCE OF WORK IF CULTURAL RESOURCES UNEARTHED

The OWNER shall notify the CONTRACTOR in writing to suspend work in a given area if cultural resources are unearthed. Contract work shall stop in the area of concern and will not be resumed until notification in writing is given to the CONTRACTOR by the OWNER.

H-1J - DISCONTINUANCE OF WORK DUE TO WEATHER

The groundwater restoration and monitoring operations shall be conducted year round, including severe winter conditions. The facilities and systems shall be winterized to assure continuous operations. The OWNER shall notify the CONTRACTOR in writing when, in his opinion, the weather conditions become too severe to continue groundwater restoration or decommissioning operations. Contract work shall stop and will not be resumed until notification in writing is given the CONTRACTOR by the OWNER that weather conditions are favorable to the resumption of operations. Even if operations are suspended the site must still be manned 24 hours per day, 7 days per week to assure security and maintenance.

H-1K - HAZARDS AND LIABILITIES

The CONTRACTOR shall warrant that he has examined the site of the work and that he is fully aware of the radioactive hazards associated with this operation. He assumes all liabilities for the welfare of his personnel and equipment pursuant to performing the work associated with such hazards.

H-1L - WYOMING PREVAILING WAGE ACT OF 1967

Not less than the prevailing hourly rate of wages for work under this contract shall be paid to all workers unless otherwise specified in writing by the State Purchasing Administrator. The prevailing wage rates are those applicable to Judicial District Number IX as shown on the "Wyoming Highway Department Wage Determination Decision - Judicial District Number IX", dated February 1, 1986. The wage determination decision is attached hereto as Attachment 1 to Section H and is incorporated hereby as part of this contract.

H-1M - CONSTRUCTION WAGE AND EMPLOYEE RECORDS

The CONTRACTOR shall conform with W.S. 27-4-410, which requires CONTRACTOR and all Subcontractors to maintain accurate records of employee names, occupations and wages paid to employees which are reviewable by the Commission of Labor, or the contracting Agency. Violation of this section is subject to criminal sanctions.

H-1N - WORKING AREA LIMITS

The CONTRACTOR will take all necessary precautions to confine his activities to the designated work areas as set forth by the OWNER in order to avoid disturbing additional lands which could contain cultural resources or other sensitive areas.

H-1O - DESIGNATED ACCESS ROADS - PUBLIC ROADS

The contractor shall be liable to the applicable government agency for damages to any public roads utilized by the Contractor. This includes rutting, loss of gravel, loss of shape, contamination of gravel, cattleguard damage, etc. The appropriate government agency has the right to reduce weight limits in order to reduce road damage if they are found to be occurring. The Contractor shall reimburse the government agency for their costs to repair damages incurred to public roads by the Contractor, subcontractors, work forces, support personnel, and suppliers and/or repair said roads to specifications supplied by the government agency at their discretion at no additional cost to the Owner.

SECTION I

Specifications Bison Basin Project

INTRODUCTION

The State of Wyoming, Department of Environmental Quality, Land Quality Division, hereinafter referred to as the OWNER, has acquired the Bison Basin in-situ uranium mining facility located in Southern Fremont County, Wyoming. The OWNER is requesting bids for the restoration, decommissioning and reclamation of the site. Access to the site is by the Bison Basin Road which extends approximately 28 miles southward from U.S. Highway 287 near Sweetwater Station (see Figure 1). The permit area consists of all of Section 25, T27N, R97W and the approximate west 1/4 of Section 30, T27N, R96W.

A licensed Research and Development (R&D) project was conducted in the permit area in 1979. The R & D test consisted of a 25 GPM plant circulating lixiviant through the uranium orebody within a 1 acre test area. The lixiviant used for the R & D test was sodium carbonate/bicarbonate, and the oxidant was oxygen injected down hole. The test work was successful in demonstrating the suitability of the orebody for both mineral extraction and aquifer clean-up using in-situ mining and restoration technology. NRC and DEQ approval of the R & D restoration effort is a matter of public record.

Following the successful completion of the R & D testing a commercial DEQ permit and NRC license were prepared and submitted to the respective agencies. In August, 1980, the Wyoming DEQ issued Permit to Mine No. 504 for the Bison Basin operation and in May, 1981, the NRC issued Source Material License No. SUA-1396 clearing the way for construction and start-up of a commercial-sized facility. Solution mining started in September, 1981, and continued for about one year with shutdown occurring in September, 1982, because of the depressed uranium market. During the approximate one year of operation only Mining Unit No. 1 was operated.

Since shutdown in September, 1982, the plant and ancillary equipment have been maintained in a high state of readiness. The mine site has been manned 24 hours a day, 7 days a week since shutdown, and the plant and wellfield are in a condition that they can be placed in operation in 30 to 60 days, weather permitting. There has been no removal of critical equipment from the site. All required regulatory monitoring and reporting have been performed during the shut-down period.

SUMMARY

The decommissioning and reclamation of the Bison Basin Mine will be performed by the CONTRACTOR in accordance with the specifications outlined herein which are based upon the approved DEQ permit to mine and applicable DEQ and NRC regulations. The DEQ-LQD will be the OWNER and will also function as the engineer in charge of the project.

The decommissioning and reclamation activities will be conducted in two separate phases as outlined below:

Phase One

1A - Groundwater restoration operations
1B - Groundwater stability monitoring

Phase Two

2A - Wellfield decommissioning, decontamination, and abandonment
2B - Plant and facilities decommissioning and decontamination
2C - Evaporation pond decommissioning and decontamination
2D - Site reclamation

Each of these activities are described in detail later in these specifications. Phase One activities including groundwater restoration and groundwater stability monitoring may take up to two to two and one-half years to complete. Phase Two will take approximately one to two years to complete. As explained in Section B, Instructions to Bidders, the project will bid for Phases One and Two separately, with three options for Phase Two. Phase One will be bid on the approved plan contained in Permit 504 (groundwater sweep, with clean water recycle from an R.O. unit), plus any alternate plan(s) the Bidder desires.

All operations shall be conducted in a manner consistent with the approved Radiological Safety Program (Reference No. 5) and the NRC Source Material License SUA-1396 (Reference No. 9). Any proposed changes must receive prior approval from the NRC.

All facilities and equipment currently on the mine site may be considered as property of the OWNER and will be available for use by the CONTRACTOR in the completion of Phase One of the project. Reference No. 12 is a complete inventory of the onsite facilities and the major equipment. The OWNER will lease to the CONTRACTOR all the facilities and equipment at no cost. The provisions of this lease being negotiated after a contractor is selected. It should be noted that the inventory does not include a large reverse osmosis unit. Depending on the method of groundwater restoration selected, this is one major piece of equipment that the CONTRACTOR may have to acquire for use on the project.

Prior to start-up the OWNER and the CONTRACTOR will conduct an inspection to document the condition of all facilities and equipment on the site including a review of the available maintenance and repair records. The CONTRACTOR will prepare a maintenance schedule for all facilities and equipment items subject to the approval of the State. The CONTRACTOR, pursuant to a separate lease agreement, shall be responsible for performing all maintenance and repair and for keeping proper records of such activities. These records shall be kept current and shall be available on site for review by the OWNER's Project Manager. Should any piece of equipment

fail or be rendered unserviceable due to misuse or lack of proper maintenance it shall be the CONTRACTOR'S responsibility to make repairs and/or furnish suitable replacements at his own expe : to assure the timely and satisfactory completion of the project.

Due to the remoteness of the site the CONTRACTOR must insure that the radio-telephone communication system is operable at all times.

The access road from the Bison Basin Oil Field to the mine site shall be kept in a condition so as to be passable in a 4-wheel drive vehicle at all times, except as follows. During severe weather it will be permissible to allow the road to remain closed for periods not to exceed seven (7) days; however, the OWNER's Project Manager shall be kept informed of all such instances. Permission must be obtained from the OWNER to allow the road to remain closed in excess of seven (7) days. The CONTRACTOR shall be responsible for coordinating and assisting with the maintenance of the road into the Bison Basin Oil Field with the owner of the oil field.

PHASE ONE

1A. GROUNDWATER RESTORATION OPERATION

General Plan

Groundwater restoration activity at the Bison Basin Mine will consist of returning the affected water in Mining Unit No. 1 to its approximate premining condition. The restoration will be accomplished by applying best practical technology (BPT) in the form of groundwater sweep, clean water recycle, and/or possible use of reductants to reduce restoration parameters to the target restoration values (see Table 1) stated in the DEQ Permit to Mine No. 504 and the NRC Final Environmental Statement (FES). The use of reverse osmosis is considered BPT, however, the DEQ will consider other methods of restoration as well as the use of a specific reductant.

The solution mining activity that took place at the Bison Basin Mine is within the production zone aquifer in Mining Unit No. 1. Figure 2 is a diagram of Mining Unit No. 1 showing all well locations. Mining Unit No. 1 was the only mining unit that operated at the Bison Basin Mine. Wells were installed in Mining Unit No. 2 but that wellfield was never operated; therefore, groundwater restoration activity will be restricted to the Mining Unit No. 1 production zone aquifer.

Site Description

The Mining Unit No. 1 wellfield covers an area of approximately 11 acres and contains 210 injection and recovery wells on about a 50 to 55 foot spacing in a 5-spot type pattern. The production aquifer in Mining Unit No. 1 averages 380 feet below the land surface and is approximately 15 feet thick. The aquifer is under confined conditions with about 250 to 300

BLE 1 Bison Basin
ARGET RESTORATION VALUES
Page Two

PARAMETER	BASELINE RANGE[1]	LIVESTOCK CRITERIA[2]	DOMESTIC CRITERIA[2]	TARGET RESTORATION VALUES[3]
Molybdenum	-0.05			Baseline
Vanadium	- 0.1	0.10[4]		Baseline
Uranium (as U_3O_8)	0.001 to 0.04	5.0[5]	5.0[5]	5.0[5]
Radium 226 (pCi/l)	2.2 to 419.3	5.0[6]	5.0[6]	Baseline Plus Statistical Error

NOTES:

- means not detected at level indicated.

Underlined number means restoration value is higher than expected background concentration.

1. Based on existing data collected from nine wells completed in the mineralized portion of the ore zone aquifer (Well Nos. OP-140-TC, OP-141-TC, OP-135, OP-136, 303-6-P 7, 303-6-P 16, 303-6-P 19, 303-6-P 22, and 303-6-P 31).

2. Based on water quality standards presented in Appendix A of the DEQ Staff Analyses of Comments dated January 14, 1980 (Table I). Blank space means no criteria established.

3. Baseline is defined for each parameter for a given mining unit as the highest value obtained from the three rounds of baseline sampling (four rounds if significant variation) collected from the restoration sampling wells within the mining unit. Radium 226, because of its extreme variation from one well to the next, is the one exception to the above described definition of baseline. Baseline for radium 226 will be on a well-by-well basis; therefore, radium 226 baseline is defined for each restoration sampling well as the highest radium 226 value obtained from the three rounds of baseline sampling (four rounds if significant variation). ~~The DEQ reserves the option to go to a restoration sampling well by restoration sampling well basis for all parameters if there is significant water quality variation among the restoration sampling wells within a mining unit. In order to achieve restoration of a mining unit the average of the post-restoration values for each parameter (except radium 226) obtained from the restoration sampling wells during a sample round must be equal to or less than the target restoration value given in this Table. Radium 226 restoration is on a restoration sampling well by restoration sampling well basis.~~

4. Criteria based on U. S. Dept. of Commerce publication entitled "Monitoring Groundwater Quality Monitoring Methodology", National Technical Information Service, PB-256 0681, June, 1976, page 142.

5. All uranium data presented in this application are uranium as U_3O_8. Livestock and domestic criteria given in this Table for uranium and the restoration value of 5.0 mg/l for uranium is on the basis of uranium as U. The conversion factor for converting uranium as U_3O_8 to uranium as U is 0.848.

6. Criteria for combined total of radium 226 and radium 228.

feet of head under natural conditions. It has a sustained yield of about 12 GPM and is very responsive to pumping in terms of drawdown at observation wells. Details on site-specific geology and hydrogeology are contained in the DEQ permit and the NRC FES (References 11 and 9, respectively).

Baseline Description and R & D Results

The baseline data from four wells in Mining Unit No. 1 (see Appendix A) document that the water quality in the production zone aquifer was unsuitable for any use other than industrial primarily due to high pH and the high concentration of sulfate, sodium, and radium-226. In order to make the background groundwater in the mining zone suitable for either livestock watering, domestic uses, or irrigation, it would be necessary to treat the water.

Restoration of the 25 GPM R & D operation consisted of circulating the purified permeate from an R.O. unit through the mined production zone aquifer. The brine (or waste water) from the R.O. unit was routed to the evaporation pond. Water quality restoration criteria were achieved after circulating six (6) pore volumes of permeate through the aquifer. An additional two (2) volumes of permeate were circulated through the aquifer as an insurance measure bringing the total amount of solution circulated to eight (8) pore volumes.

The R & D restoration results clearly indicated that a return to background groundwater quality for all elements is neither technically practicable nor economically reasonable. The restoration requirements thus fall into the category described in the Land Quality Division Regulations, Chapter XXI (Reference 10) which states that if a return of all elements (chemical species) to background groundwater quality cannot be achieved, the groundwater should be returned to a condition of pre-mining use suitability. The approved target restoration values (Table 1) were developed on the basis of the above regulation.

The baseline values for each parameter are listed for Mining Unit No. 1 in Appendix A. Restoration for a particular parameter will be deemed successful when the value for that parameter from the restoration sampling wells is equal to or less than the target restoration value (see Table 1) for three consecutive samples each taken at least two weeks apart, and after the stability monitoring period is successfully completed. Restoration of the Mining Unit No. 1 aquifer will be judged by comparison of data for each parameter from each of the four restoration wells, with the target restoration values in Table 1. For additional information on this subject the reader is referred to the DEQ Permit to Mine No. 504 (Reference No. 11).

Wellfield Operation and Pumping Plan

• The CONTRACTOR shall be responsible for designing the groundwater restoration plan, including wellfield operations and pumping plans, subject to review and approval by OWNER. The number of wells that should be operating at any one time is dependent primarily on the size of R.O. unit (or other approved water treatment device) acquired for the restoration activities. In order to complete the entire project within a reasonable time frame it has been determined that an R.O. unit with a capacity of approximately 300 GPM. will be required. Based on an assumed R.O. unit size of 300 GPM, a total of 137 injection and 70 recovery wells could be used to circulate water through the wellfield with approximately 50 percent of the recovery wells located on the wellfield perimeter.

Allowing for possible contamination outside of the wellfield boundary the total affected area in Mining Unit No. 1 is estimated at 13 acres (11.7 acres plus 10 %). Using 13 surface acres, one pore volume is calculated to be approximately 19 million gallons of water (13 acres x 43,560 ft/acre x 15 ft aquifer thickness x 0.3 porosity x 7.48 gal/ft = 19.06 million gallons). The pore volume calculation of 17 million gallons in the DEQ permit did not include any affected area outside of the wellfield boundary. To circulate 19 million gallons through the wellfield at 300 GPM should take about 44 days. It is estimated that groundwater restoration will be achieved after circulating six (6) pore volumes. The contract will be for a maximum of six (6) pore volumes (114 million gallons). Any additional groundwater restoration required would be negotiated as a change order to the contract.

Using an average permeate to brine ratio of 83%/17%, the R.O. unit will produce about 19.4 million gallons of waste liquid to discharge to the evaporation ponds, during the treatment of six pore volumes. Considering the average evaporation rate (41 inches per year), the ponds surface area (7 acres) and the useable ponds storage volume (9 million gallons), it should be possible to handle up to 17 million gallons of waste liquid in one year. In order to accommodate the additional waste, it will be necessary to increase the evaporation rate and/or treat the water in the ponds with an R.O. unit and discharge the permeate on the surface and/or reinject into the wellfield. Surface discharge will require a NPDES permit from the Water Quality Division of the DEQ. Effluent limitations are listed in Appendix D.

If restoration of heavy metals becomes a problem, the CONTRACTOR shall be responsible for designing and implementing a plan for the use of a reductant. Approval of any reductant shall be obtained from the OWNER and the NRC prior to introduction of the chemical(s) into the injection stream. At this point, based on a review of existing water quality data obtained from the Mining Unit No. 1 production zone aquifer by the Wyoming DEQ on September 9, 1985 (see Appendix B) it does not appear that restoration of heavy metals will be a problem; however, the CONTRACTOR shall be responsible for making this determination, planning any appropriate treatment and insuring that any such problems are properly mitigated.

Plant and Water Treatment Unit Operation

The existing processing plant and support equipment will be heavily utilized during the groundwater restoration phase of the decommissioning activities. A detailed diagram of the plant is presented in Figure 3. Electrical power will be generated on site using the two natural gas powered generators. The CONTRACTOR will pay the natural gas bills on a monthly basis for the duration of the contract. Appendix F contains a summary of gas consumption and current costs at the site. The laboratory facilities may be used to perform assays on water samples from the wellfield.

As noted in the bid schedule in Section C, the CONTRACTOR will be required to demonstrate the performance of the reverse osmosis or other alternative water treatment plant. This demonstration will be judged on the basis of three criteria: 1) Production of no less than 200 gpm of treated water, 2) Production of water with a TDS of 1,000 mg/l or less, and 3) A permeate to brine ratio of 70%/30% or greater. Once the plant is producing continuously and meeting all three of these criteria then the demonstration will be deemed successful.

The solution from the wellfield will be routed to the recovery surge tanks via an 8 inch pipeline. From the recovery surge tanks the solution should be circulated through the ion exchange columns to remove uranium, and then the solution should be pumped through the sand filters to remove solids. Once the uranium concentration in the solution from the wellfield decreases to 5 mg/l the solution need no longer be routed through the ion exchange columns. Uranium oxide collected during the restoration process should be precipitated and placed in storage for ultimate shipment to market in slurry form. It is estimated that the equivalent of approximately 2,380 pounds of dried uranium oxide will be collected. This estimate is based upon the recovery of 15 ppm of uranium from the treated groundwater. Any uranium oxide produced will be the property of the CONTRACTOR. It will be his responsibility to insure that it is handled and disposed of properly. Bids should reflect the value to be derived from this product.

Considering the amount of yellowcake which could be produced, a NRC source material license will be required. There are two options which can be pursued in this respect:

1. If the CONTRACTOR holds a source material license, the source material may be processed, stored and disposed of under that license.

2. The CONTRACTOR may arrange a subcontract with a licensed uranium recovery operator. The licensed operator could then take possession of the uranium slurry and dispose of it under its license.

Either option will require prior approval from the NRC.

After the solution from the wellfield has been filtered, it shall be pumped through an R.O. unit or other acceptable water treatment unit to reduce the contamination. The actual size of the water treatment unit may depend on the availability of used equipment, however, the unit shall have an approximate capacity of 300 GPM. The clean water (permeate) from the R.O. unit will be returned to the wellfield via an 8 inch pipeline and injected back into the production zone aquifer. The waste stream (brine) from the R.O. unit will be routed via the buried 4 inch pipeline to the evaporation ponds.

The CONTRACTOR shall install and maintain a totalizing flow meter and a separate instantaneous flow rate meter on both the production waterline entering the plant and the return (injection) waterline leaving the plant in order to accurately monitor the volumes of water being treated.

Groundwater Monitoring During Restoration Operations

Eleven wells within the production zone of Mining Unit No. 1 will be sampled by the CONTRACTOR during the aquifer restoration phase to monitor the effectiveness of the groundwater cleanup operation. In Mining Unit No. 1 the operational sampling wells will include P-22, M-4, RSW-2, and RSW-4. In addition to these four designated restoration sampling wells, seven other wells will be sampled to provide coverage of approximately one well per acre within the wellfield. Selection of these additional wells will be made after the pumping and injection plan is developed by the CONTRACTOR and approved by the OWNER. Only production/pumping wells will be sampled. No wells utilized for reinjection of clean water will be utilized. The locations of all the wells are shown on Figure 2. The baseline water quality data are presented in Appendix A.

The 11 operational sampling wells will initially be sampled twice a month and analyzed by the CONTRACTOR for the following three (3) Upper Control Limit (UCL) excursion parameters: specific conductivity, chloride, and Uranium. Once the sampling indicates that the eleven wells are approaching restoration target values for these three parameters, then the other three UCL parameters (total bicarbonate plus carbonate, sodium and sulfate) will also be analyzed.

The 16 excursion monitoring wells listed below, and shown on Figure 2, will be sampled by the CONTRACTOR during groundwater restoration operations.

Production Zone	Upper Zone	Lower Zone
M-8	M-3	M-19
M-9	M-17	M-63
M-10	M-18	
M-11	M-61	

Production Zone	Upper Zone	Lower Zone
M-12	M-62	
M-13		
M-14		
M-15		
M-16		

These 16 wells will be sampled twice monthly for the first three pore volumes and monthly thereafter and analyzed for: specific conductivity, chloride, total carbonate plus bicarbonate, and water level. Two casing volumes of water shall be pumped from each excursion monitoring well prior to sampling.

Once restoration criteria for the six UCL parameters are met and water quality appears sufficiently stable (at least three consecutive samples taken at least two weeks apart, from each of the four restoration wells are less than or equal to the target values), a verification round of samples will be collected by the CONTRACTOR from the four designated restoration sampling wells and any monitor wells previously on excursion. Verification round samples from the four designated restoration sampling wells will be analyzed for all parameters listed in Table 1. Verification round samples from any monitor wells previously on excursion will be analyzed for the six (6) UCL parameters. Confirmation samples will also be taken at this time by the OWNER. Restoration will be judged by comparison of data from each of the four restoration wells to the target restoration values for each parameter listed in Table 1. If analyses of the verification round samples confirm that restoration criteria have been met, then groundwater restoration operations will cease and the stability period will commence. Groundwater restoration operations (up to a maximum of six pore volumes) shall continue until such time as the analyses for the verification/confirmation round of sampling have been received by the OWNER.

In addition to the 11 operational wells and the 16 excursion wells, the CONTRACTOR will also be responsible for monitoring the leak detection systems on each of the three evaporation ponds. Each of the leak detection sumps will be checked twice per month for presence of liquid. If liquid is present, then samples will be collected and analyzed to verify from its composition that liner failure has occurred.

If liner failure is confirmed, then an attempt will be made to immediately repair the leak while liquid remains in the pond. If this procedure is not successful, then the CONTRACTOR will begin immediately to transfer liquid to other ponds and/or treat the solution for surface discharge to lower the pond level and then repair the leak.

1B. GROUNDWATER STABILITY MONITORING

Following completion of groundwater restoration operations, including

verification/confirmation sampling, the CONTRACTOR will sample the four designated restoration wells on a monthly basis for six (6) months. Samples will be analyzed for all parameters listed in Table 1. Any additional groundwater sampling will be negotiated as a change order to the contract.

If the six (6) months of monitoring data indicates that all parameters are stable and remain below the target restoration levels, then the mining unit aquifer will be deemed successfully restored and Phase I of the project will have been completed.

If the six (6) months of monitoring data indicates that stability has not been achieved, then additional monitoring (up to a total of twelve months) may be required, however, this would be negotiated as a change order to the contract. If all parameters remain below the target restoration levels for this period, then restoration will be deemed successful.

PHASE TWO

INTRODUCTION

If the contract includes Phase Two, then after the groundwater restoration stability period has been successfully completed, Phase Two of the project will promptly commence. This will entail the complete decommissioning, decontamination and reclamation of the site. All facilities and equipment shall be either removed from the site or buried. The area will be returned to native rangeland. Phase Two will be completed within 24 months.

Depending on how the contract may be let, the CONTRACTOR will be required to dispose of some or all of the equipment and facilities. Any such disposal shall insure that:

1. No radioactive contaminated materials may be disposed of on the site. All such materials must be hauled off site and placed in a NRC approved disposal site (uranium tailings pond) by the CONTRACTOR.

2. All decontamination, disposal, and release of equipment shall be conducted in accordance with Reference No. 7, the NRC Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct or Source Materials, dated September 14, 1984.

The CONTRACTOR will be responsible for either decontaminating equipment or hauling it off site to a NRC approved waste disposal facility, thus the decontamination procedures (acid wash) described below are at the CONTRACTOR'S discretion, but shall be subject to the prior approval of the OWNER. The CONTRACTOR shall be responsible for making the necessary arrangements with one of the local uranium producers for disposal of contaminated materials in their NRC licensed disposal site.

As outlined in Section B-1Q - Bid Alternatives and Options, Phase II of the project will be bid under three options. Under Option A. the CONTRACTOR will receive sale/salvage rights to all the facilities and equipment. Under Option B. the CONTRACTOR would receive sale/salvage rights to the significantly contaminated equipment and facilities and also the Process Plant/Shop/Warehouse/Mine Office Building. Under Option C. the CONTRACTOR would receive no sale/salvage rights on any of the equipment or facilities.

2A. WELLFIELD DECONTAMINATION, DECOMMISSIONING, AND ABANDONMENT

All above ground equipment located in the wellfield, all drop pipe and down hole electrical cords and equipment, and all submersible pumps used in Mining Unit No. 1 shall be surveyed for radioactive contamination. Wellfield equipment that is not contaminated or that is decontaminated will either be sold or buried on site. Wellfield equipment that cannot be decontaminated shall be transported off site to an NRC licensed waste disposal facility (tailings pond).

The initial check for contamination of surface and down hole wellfield equipment shall consist of an alpha count survey. If contamination is present a swipe survey shall be made to determine the level of activity of removable contamination. Piping that is contaminated shall be dismantled or cut into 20 foot lengths and placed in an acid bath for decontamination purposes. Wellheads, water meters, and other service equipment shall be taken apart and washed in acid if needed. Submersible pumps shall be divided into their component sections, motor and pump ends. Motors are sealed and should require surface cleaning only. The pump ends should either be disposed of off site at an NRC licensed facility or dismantled and the individual parts acidized. Additional specific procedures to perform the above mentioned cleaning are contained in the Job Safety Analysis, Worksheet No. 13, Appendix C.

Prior to release for unrestricted use or for burial all items shall be shown on a release form issued by the radiation safety staff. A single form may be used for small items such as a box of fixtures or bundles of pipe; however, each individual item shall have been surveyed. Large items shall have individual release forms issued by the radiation safety staff. Contaminated materials that leave the site for off-site disposal will be placed inside containers or trailers that have a release form issued stating that the outside surface of the container or trailer was surveyed and found free of radioactive contamination.

Once the OWNER and NRC have accepted the groundwater restoration results at the end of the stability period, all production, injection, and monitor wells will be properly abandoned in accordance with Wyoming Statute 35-11-404. The well abandonment procedure will consist of filling the casing with a bentonite based slurry mixture, meeting the specifications required by Chapter XV of the DEQ/LQD Rules and Regulations, from the bottom of the hole to within about 2 feet of the surface. The bentonite slurry will be applied from the bottom of the hole using pipe. To minimize land disturbance in the wellfield areas the bentonite slurry must be premixed in a tank and pumped into the wells using a small pumping unit. A drilling rig will not be utilized. The casing at a depth of about 2 feet below the land surface will be cut off and capped with a schedule 40 PVC cap. The hole will then be backfilled to the surface, and the land surface

04008745

BISON BASIN DECOMMISSIONING PROJECT

SECTION LISTING

**It is the individual bidder's responsibility to ensure that all the above information is contained in this document.

Official cy to Ed

620