



Bluewater Mill
 Post Office Box 638
 Grants, New Mexico 87020
 Telephone 505 876 2211
 Facsimile 505 876 2772

D. Little
 ② DCS

March 31, 1994

Mr. Joseph Holonich, Branch Chief
 United States Nuclear Regulatory Commission
 Uranium Recovery Branch
 Division of Low-Level Waste Management
 and Decommissioning, NMSS
 Mail Stop 5 E-2
 11555 Rockville Pike
 Rockville, MD 20850

Re: License No. SUA-1470
Docket No. 40-8902

Dear Mr. Holonich:

In accordance with the March 31, 1994 telephone conversation between Ed Hawkins (URFO Denver), Pete Garcia (URFO Denver) and me, this letter is a request to amend Atlantic Richfield Company's (ARCO) NRC Material License SUA-140 (License) to construct a temporary lagoon to receive and evaporate water generated from equipment decontamination activities at the Bluewater Mill Site. The temporary lagoon design is fully described in a letter dated March 4, 1994 to the New Mexico Environmental Department (NMED), a copy of which was sent to NRC's URFO in Denver. NMED approved construction of the lagoon on March 11, 1994.

As discussed with Mr. Hawkins and Mr. Garcia during the telephone conversation, the construction of the lagoon is a critical item necessary to meet the license requirement of radon barrier completion date of December 28, 1994. Your expeditions approval of a license amendment will be approved.

Should you have any question regarding this request, please contact me or Natver Patel of my staff.

Sincerely,

R. S. Ziegler
 R. S. Ziegler
 Project Manager

/jmn

Attachment

pc: Natver Patel
 R. Ohrbom, NMED
 E. Hawkins, URFO, Denver
 P. Garcia, URFO, Denver

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Atlantic Richfield Company

ARCO-6011-A

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Bluewater Mill
Post Office Box 638
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March 04, 1994

Ms. Dale Doremus
Program Manager
Groundwater Section
New Mexico Environmental Department
1190 St. Francis Drive
Santa Fe, New Mexico 87502

RE: Request for Installing lagoon without modification of Discharge Plan DP-21.

Ms. Doremus:

The purpose of this letter is to request your approval to install, without modification of Discharge Plan DP-21, a small temporary storage and evaporation lagoon during the time period our final evaporation pond is being decommissioned and the Reclamation completed.

As you are aware from previous correspondence and discussions, the Atlantic Richfield Company (ARCO) Bluewater Mill Site (Site) is in the final stages of implementing a U.S. Nuclear Regulatory Commission (NRC) approved Reclamation Plan. This Plan requires that all evaporation pond residues and associated byproduct contamination must be disposed of on the tailings pile at the Site and covered with a radon barrier by December 1994.

To accomplish this Plan by the December 1994 deadline, ARCO will have to excavate, dry, and bury the last evaporation pond (Pond IIIA), this summer. Unfortunately, the excavation of this pond will result in the contamination of excavation equipment and the loss of this pond to receive and evaporate equipment decontamination water. Prior to release for unrestricted use, the equipment must be decontaminated which requires water. For groundwater protection purposes, the NMED prohibits discharging any water, regardless of quantity or quality, on the tailings pile or on the ground. Thus, ARCO will have to construct a temporary lagoon. To control the lagoon's size and amount of residue, most of the gross contamination on the equipment will be mechanically removed while the equipment is on

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the top of Acid Tailings Pile (ATP), without using water, and prior to placement of final radon barrier. Final equipment decontamination will require some washing or steam cleaning to achieve release for unrestricted use and to satisfy the NRC's "As Low As Reasonably Achievable" (ALARA) requirement. The resulting wash water generated and discharged in the proposed temporary lagoon will be significantly lower in byproduct content than that previously discharged in the evaporation ponds under Discharge Plan DP-21.

The proposed lagoon will be constructed on top of a portion of the mill disposal area at the Site as shown on the attached drawing. This portion of the disposal area has been covered with a compacted clean soil layer. The purpose of constructing the lagoon on top of the disposal area is to minimize the potential for contamination of equipment during decommissioning of the temporary lagoon, as the pond residue can be simply dozed into an adjacent open portion of the disposal area to eliminate excavation and hauling. The volume of residue from evaporation of the water in the lagoon and the amount of liner will be minimal, which will allow for quick burial into the disposal area.

The lagoon will be constructed with a double liner of 30 MIL PVC with a 6 inch sand filter bed between the PVC liners. A perforated schedule 40 drain pipe system will be installed in the filter bed for seepage collection. Any seepage of water will be collected in a sump triple lined with 30 MIL PVC. The detailed design drawings are attached to this request.

The lagoon will be removed by June of 1995 as the Site reclamation activities will be sufficiently complete so that the lagoon will not be required. After removal of the lagoon liners, the soil under the lower liner will be surveyed for Ra-226 content. Any soil above the NRC's cleanup criteria for Ra-226 will be excavated and dozed into the disposal area with the liner. The disposal area will be stabilized and reclaimed (radon cover and erosion protection), consistent with the approved Reclamation Plan.

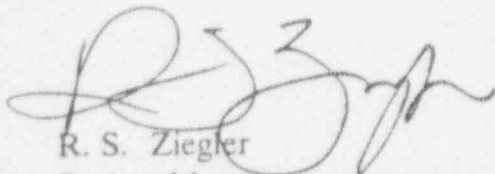
To date, ARCO has decommissioned and reclaimed six of the seven evaporation ponds under Discharge Plan DP-21. Extensive gamma radiation surveys and soil sampling have been performed to verify cleanup below the NRC's cleanup criteria of 5 pCi/gm Ra-226 above background level. During and after completion of reclamation of the Pond IIIA, necessary surveys and soil sampling will be conducted for cleanup and verification. ARCO will submit results of soil sampling to the NMED for all evaporation ponds under Discharge Plan DP-21.

Ms. Dale Doremus
March 04, 1994
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In summary, ARCO hereby requests your approval to install, without modification of Discharge Plan DP-21, a small temporary storage and evaporation lagoon. In order to meet the deadline required by the NRC for reclamation activities, construction of the lagoon must start in April 1994.

This request for the lagoon was discussed by Mr. Richard Ohrbom of your staff and Mr. Natver Patel of my staff. Your prompt approval of this request is greatly appreciated. Should you have any question regarding this request, please contact Natver Patel of my staff.

Sincerely,

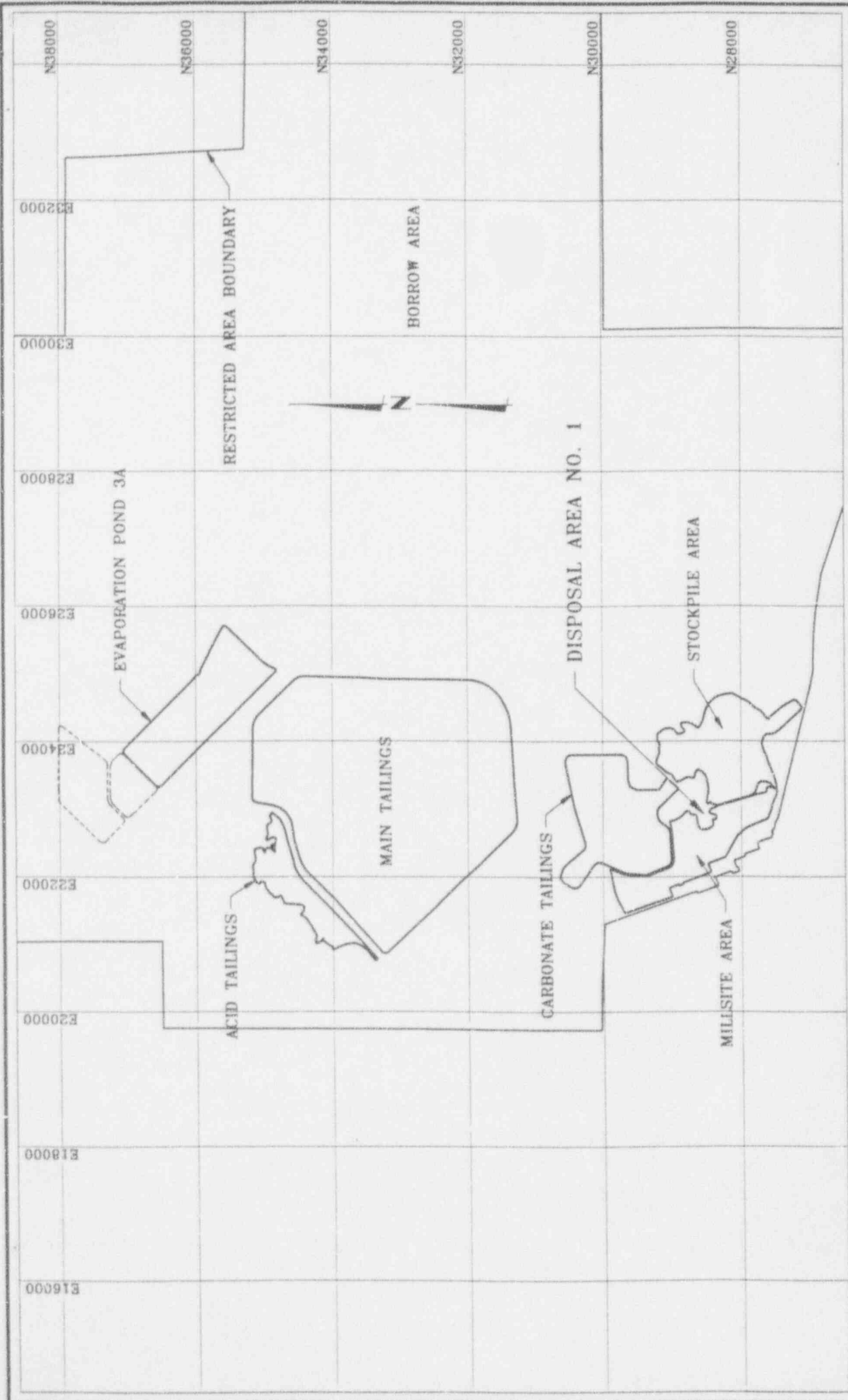


R. S. Ziegler
Project Manager

/cah

Attachment:

pc: R. Ohrbom, NMED
R. Hall, NRC, URFO
N. Patel
S. Purdy
C. Sanchez



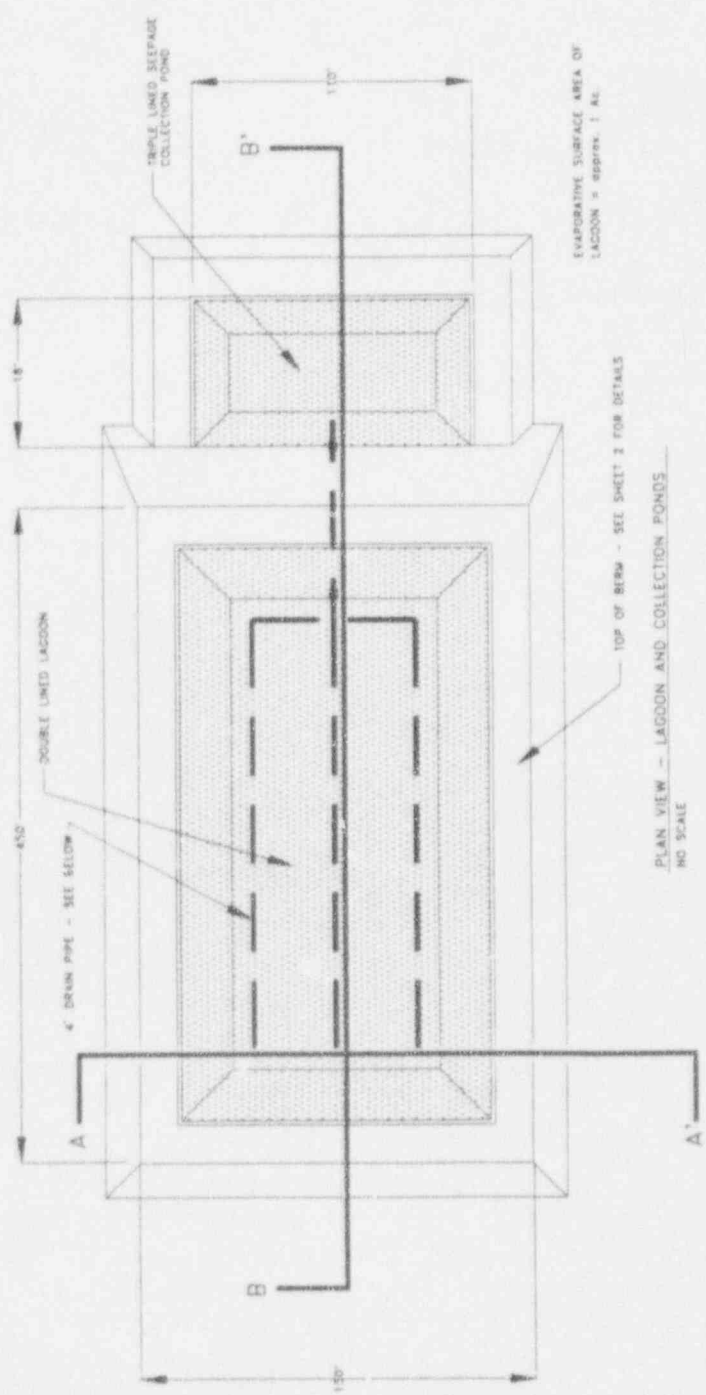
DRAWN BY: []
 CHECKED BY: []
 DATE: []
 SCALE: []
 PROJECT NO.: []
 SHEET NO.: []



**TEMPORARY STORAGE
 EVAPORATION LAGOON
 SITE PLAN
 ARCO BLUEWATER MILL N.M.**

ANDERSON ENGINEERING CO., INC.
 1234 Main Street
 San Jose, CA 95128
 Telephone: (408) 731-1000 Fax: (408) 731-7800
 CIVIL ENGINEERS CONSTRUCTION MANAGERS

NO.	DATE	BY	REVISION

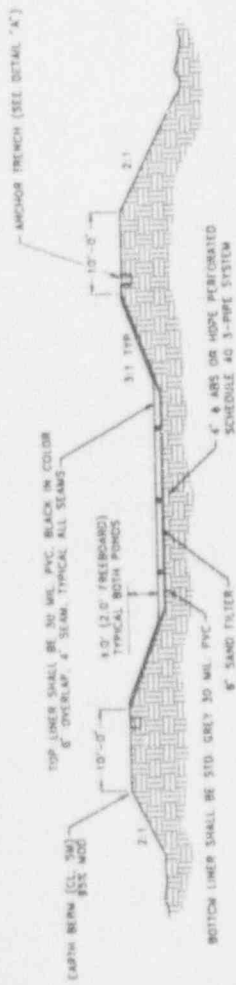


PLAN VIEW - LAGOON AND COLLECTION PONDS
NO SCALE

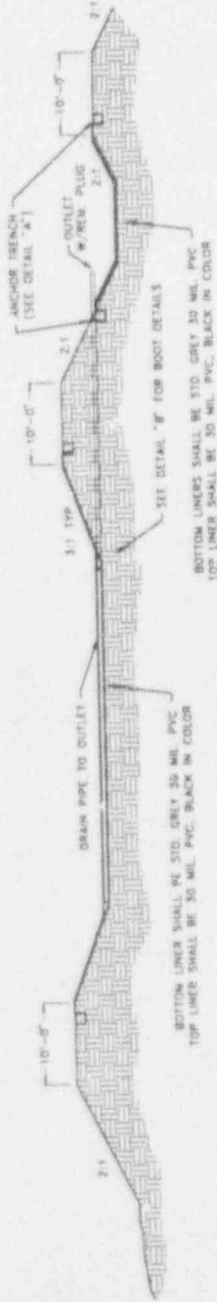


DRAIN PIPE DETAILS

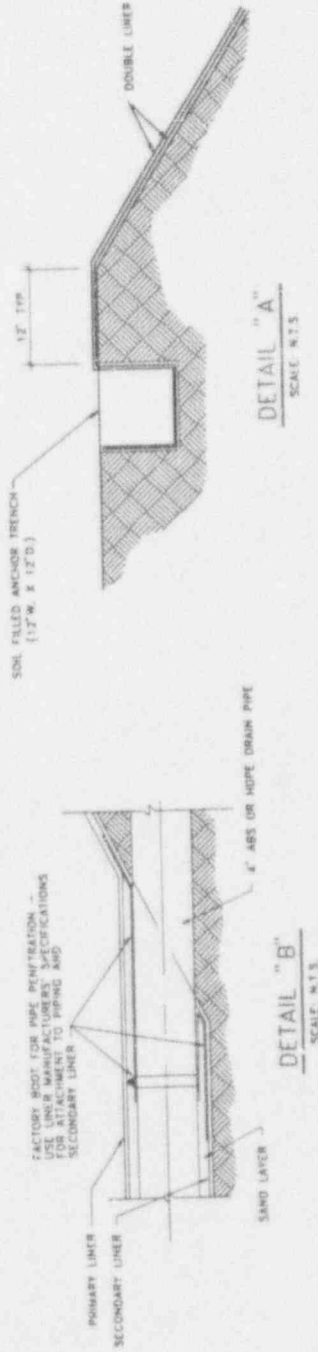
		ANDERSON ENGINEERING CO., INC. 2000 West 5th Street Fort Worth, Texas 76102 Telephone (817) 751-4244 Fax (817) 751-1932	
TEMPORARY STORAGE EVAPORATION LAGOON PLAN VIEW AND PIPE PLAN ARCO BLUEWATER MILL, N.M.		CIVIL ENGINEERS CONSTRUCTION MANAGERS	
PROJECT NO. 1000000000 SHEET NO. 1000000000		DATE: 10/10/00 DRAWN BY: J. P.	



CROSS SECTION "A-A" - DOUBLE LINED LAGOON
SCALE: N.T.S.



CROSS SECTION "B-B" - DOUBLE LINED LAGOON AND TRIPLE LINED SEEPAGE COLLECTION AREA
SCALE: N.T.S.



NO.	DATE	REVISION

ANDERSON ENGINEERING CO., INC.
144 S. Main St. Salt Lake City, Utah 84102
Tel: (801) 533-4444 Fax: (801) 533-7839
CIVIL ENGINEERS CONTRIBUTION MANAGERS

TEMPORARY STORAGE
EVAPORATION LAGOON
CROSS SECTIONS AND DETAILS
ARCO BLUEWATER MILL, N.M.

ATLANTIC REGIONAL COMPANY
DESIGN

NAME: P. O'NEILL
DESIGNER: P. O'NEILL
CHECKED: P. O'NEILL
DATE: MARCH 1993
PROJECT: ARCO BLUEWATER MILL
SCALE: AS SHOWN
REVISIONS: NONE