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January 28, 2010

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Mr. Jack E. Whitten, Chief
US Nuclear Regulatory Commission, Region IV
Division of Radiation Safety & Safeguards
612 East Lamar Blvd, Suite 400
Arlington, TX 76011-4125

Dear Mr. Whitten:

Pursuant to our License SUA-1475, submitted herewith are the result of our Annual ALARA Audit conducted on December 07, 2009.

If you have any questions, please advise.

Sincerely,

Larry Bush
Manager

Cc: Steve Hill, GE
Roy Blickwedel, GE
Keith I. McConnell, USNRC
Yolande Norman, US NRC

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Date ___/___/___ QC'd by _____

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To: File January 28, 2010

From: Max Chischilly Jr., RSO

Subject: ALARA Committee Meeting and Audit conducted on December 07, 2009

The UNC Mining and Milling ALARA Committee met on December 07, 2009 to audit the result of the radiological monitoring program for the fourth quarter of 2008 and the first three quarters of data for 2009. Current committee members are: Larry Bush, Manager, and Max Chischilly Jr., Radiation Safety Officer. The Committee reviewed Mr. Chischilly's Annual Report entitled "Environmental and Personnel Monitoring Program for Inactive Status Report from 4th Qr. 2008 to 3rd Qr. 2009.

Significant Finding and Event:

1. No radiation exposure was recorded for United Nuclear Corp. (UNC) employees, contractors, and the public due to our current site status conditions.

2. Training and refresher training of employees on radiation protection and safety was done in 2009 as required.

3. All documentation and monitoring required by our radiation protection program and NRC License was in order for 2009.

4. Available data for this Report is also reported as per suggested format in Regulatory Guide 4.14 (see attached Table-1 on pg. 9 of 9).

5. The annual land use survey was done on 3-26-09 for 2008. Significant change or event include:

    a. No change in the number of residential home sites, land ownership/use and well ID/use.

    b. Five new extraction wells (NW-1, NW-2, NW-3, NW-4 and NW-5) were drilled/installed on UNC's Sec. 36, northern most Zone 3 plume area during the month of September 2008. This new pumping system (located north of and adjacent to well NBL-1) is basically designed to intercept and recover the impacted water and pumping started on February 23 and 24, 2009.

c. Right –of- Way ground clearance for construction and installation of an additional underground gas pipeline was undertaken and completed by Transwestern Pipeline Company within the two-mile radius during 2008. This project went across UNC's section 2 (SE corner) and 36 (SE corner); Navajo Tribe's Section 1 (NW area), 11, 9 and northern most portion (NE area); Indian Allotted Section 31 (NW corner) and 10.

d. In between May 9, 2008 and July 3, 2008 about 34,832 Cubic yards of native clean soil was removed from the nearby Pinedale Chapter House and was stock piled on UNC's Sec. 2, west of mill shaft construction yard. The hill soil removal project was agreed upon between the Pinedale Chapter Community and UNC and will be stored for future use as a remedial borrow cover material.

6. The environmental monitoring program is limited and the reported items in the Environmental Monitoring Summary Data (pg. 7 of 9) are solely based on available data. The only required radiation-monitoring program will be under an RWP (Radiation Work Permit), in pg 6 of 9 of this report and no RWP was issued during this annual period.
7. The active radiation monitoring instruments are routinely calibrated and the Personnel Radiation Monitoring program under RWP is still in effect, but is in a standby status awaiting the final pond closure reclamation activity (see also pg. 6 of 9).
8. Continual monthly monitoring is ongoing for well NBL-1, NBL-2, PB-2, PB-3, PB-4, and RW-A to track and locate the northern most migration extent of the seepage impacted water or plume in Zone 3. Also note that beginning June, 2009, NW well series (1 thru 5) are added to the monthly monitoring program.

9. Continual pumping/extraction is ongoing in the Zone 3 plume area for well RW-11, RW-16, RW-A and PB-2. Also since Feb. 2009, NW-1, NW-2 and NW-3 have been pumping wells and NW-4 and NW-5 served as monitor wells. But a new pumping regime commenced during the second week of November 2009 whereby NW-3 was turned off and pumping started for NW-4. The pumped water is discharged into the tailings North Evaporation Pond.

10. Ms. Linda Gersey and Mr. Jack E. Whitten identified no violations or deviations on a routine NRC inspection conducted on May 4 and 5, 2009.

11. On August 18, 2009 remedial construction activity (i.e. Interim Removal Action) started on UNC's inactive Northeast Church Rock Mine Site in Sec. 35 (Indian Trust Land) and the adjacent Navajo Reservation land. The USEPA has overseen this Non-Time Critical Removal Action project under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) to address the possible threat to human health and the environment at the site. UNC retained MACTEC Development Corp. to implement the project and MWH Americas, Inc. to design, observe, and perform environmental monitoring and soil sampling, Also, AVM performed the preliminary and final verification radiological survey and UNC assisted on the excavation control. Basically, the initial phase included removing soil exceeding 2.24 pci/g of Ra-226 from the Navajo Reservation lands possibly attributable to past NECR mining activities; reclaim the side-slopes of NECR-1 pad, install erosion and sedimentation controls to prevent transport of mine material onto Navajo Reservation lands. Contractor's radiation safety program, ALARA and health physics procedures were implemented during the project and work ceased on Jan. 11, 2009 due to weather conditions and will resume during the spring of 2010.

12. As requested by Chester Engineers, a Zone 3 injection test was performed during Oct. 30, 2009 and Nov. 4, 2009 on monitor well NBL-2 by MACTEC and UNC, as part of a potential remedial option for the on going Site-Wide Supplemental Feasibility Study. The primary goal was to empirically assess the amount of water a well in the non-impacted, northern part of Zone 3 can accommodate by injection and to determine a new estimate of the hydraulic conductivity in the area. This test was also to evaluate the potential for creating a hydraulic (and possible alkalinity) barrier, using multiple injection wells, to limit further northward advance of seepage impacted ground water in the northern part of Sec. 36. In short, the constant head test did determine the hydraulic conductivity from 8.0 to 8.1 gpm, further testing was not requested and a report will be submitted to agencies as well as for internal discussion.

13. Based on the routine annual ALARA committee meeting and audit on December 7, 2009; the program has met the requirements under 10 CFR Part 20, Subpart G-Radiation Protection Programs, Sec. 20.1101 (c).

Past Significant Events:

1. The Mill Site was released from a restricted to unrestricted area by License # SUA-1475 Amendment # 21 in 1995.
2. The final tailings reclamation was completed in 1995. The last of drainage channels was completed in 1996. The reclamation of evaporation ponds is being delayed until the ground water Corrective Action Plan is deemed completed by the NRC and EPA.
3. The radon cap covers was completed in 1996 with exception of the lined evaporation ponds.
4. The report submitted January 03, 1997 and on January 13, 1998 on Radon Emanation Testing of UNC's Church Rock Tailings Site shows the average Radon Flux to be 5.67 pci/m2sec., which is less than the allowable of 20.0 pci/m2sec.

UNC MINING AND MILLING

ENVIRONMENTAL SURVEILLANCE

Monitoring Program

*1. The Radiation Safety Officer (RSO) inspects the restricted areas monthly.

*2. Air sampling is continuously done at four locations; one lcoated upwind of the tailings impoundment, two located downwind of the tailings impoundment, and one background sampling location (see EMP-2).

*3. Gamma exposure is continuously monitored with TLDs at the same four locations as the air sampling. The TLDs are changed out and analyzed semi-annually (See Procedure EMP-3).

*4. Ambient radon is continously monitored with radon detectors at the same sites as air sampling. The detectors are changed out and analyzed quarterly and reported semi-annually (see Procedure EMP-4).

*5. Groundwater samples are collected and analyzed quarterly at two locations near tailings, and one domestic water well at the mill site (see Procedures EMP-5 and EMP-5a).

6. Equipment being sold or for other purposes, leaving the restricted area is surveyed for compliance with guidelines for release to unrestricted use (see Procedure EMP-8A).

*7. An Effluent Report will be submitted semi-annually within 60 days of each six-month period. All of the Environmental Monitoring Program data is included in this report, with the exception of the equipment surveys (see EMP-9).

Note: The above (*) marked items are deleted as per NRC approved License amendment 29 dated 6-18-99 deleting condition's #16, #22, and #28.

Additional Note: Item #1 procedure is continued on 10-19-99, to show and maintain the integrity of the restricted tailings area. Effluent Report under Item #7 is reported when pertinent data is available.

Max Chischilly Jr. 1/28/02 Max Chischilly Jr. 1/7/09 Max Chischilly Jr. 1/9/10
Max Chischilly Jr. 1-20-03 Max Chischilly Jr. 1/17/05
Max Chischilly Jr. 1/29/01 M. Chischilly 1/22/99 Max Chischilly Jr. 1/24/06
Max Chischilly Jr. 1/20/00 Max Chischilly Jr. 1-20-04 Max Chischilly Jr. 1/25/07
E Morales 1/19/95 E Morales 1/4/97 Max Chischilly Jr. 1/28/08
E Morales 1/20/96 E Morales 1/22/98

UNC MINING AND MILLING

PERSONNEL RADIATION PROTECTION PROGRAM

External Exposure Monitoring

1. Employees working within the tailings area wear a TLD badge which is changed out and analyzed semi-annually. (See Procedure PMP-2).

Internal Exposure Monitoring

2. Self-monitoring Alpha survey is done by employees working within the tailings area daily prior to leaving the area with occasional spot checks by the RSO or the Radiation Technician (see Procedure PMP-4).

3. Bioassays are done on employees working within the tailings area semi-annually (See Procedure PMP-5).

4. Continuous air samples are taken in the general tailings working area of employees for the purpose of calculating exposures (see Procedure PMP-6).

5. Surface surveys of eating areas, change room benches, and labs are done monthly.

6. TLD, bioasssays and air samples will also be done under the RWP program (see Procedure PMP-9).

7. Instrumentation and calibration (see Procedure PMP-10).

*NOTE Rev. 4, PMP

Personnel Radiation Monitoring, 1 through 6, to be done as needed under an RWP.

Mary Chischilly Jr. 1/9/10
Mary Chischilly Jr. 1/7/09
Mary Chischilly Jr. 1/28/08
E Monroe 1/15/97
1/20/96 E Monroe
Mary Chischilly Jr. 1/25/07
E Monroe 1/20/97
1/22/98 E Monroe
Mary Chischilly Jr. 1/24/06
Mary Chischilly Jr. 1/17/05
M. Chischilly 1/22/99
Mary Chischilly 1/20/00
Mary Chischilly 1/29/01
Mary Chischilly Jr. 1/28/02
Mary Chischilly Jr. 1/20/03
Mary Chischilly Jr. 1-20-04

ENVIRONMENTAL MONITORING SUMMARY DATA
FROM 4TH QUARTER 2008 TO 3RD QUARTER 2009

Environmental Monitoring	Required Analysis:	Highest Result Obtained:	Allowable:
1. Quarterly Ground Water GW-Wells: (NOTE: Available data is on GW-3 Well)	U-Nat (mg) / l	0.145 (dissolved or total)	0.30 (NRC) 5.0 (EPA)
	TH-230 (pci) / l	0.70 (dissolved or total)	5.0 (NRC)
	RA-226 (pci) / l	0.35 (dissolved or total)	5.0 with RA-228 (NRC & EPA)
	PB-210 (pci) / l	2.60 (dissolved or total)	1.0 (NRC)
	PH (units)	6.59	6 – 9 (NMED)
2. Surface Alpha:	Any Material or Equipment released, will meet the requirements for unrestricted use.		a. Removable is 1000 dpm / 100 cm2 b. Fixed average is 5000 dpm / 100 cm2 where area is not greater than 1m2 c. Gamma is 40 ur/hr

3. Monthly Inspection Findings:

   a. Installment of additional fencing device was done during the first week of 11-08 at the bottom of SW pipeline arroyo after a horse had gained entry on 10-31-08.
   b. Two "No Trespass" signs were stolen from the SW perimeter fence line on 4-27-09 but three signs are still posted in the area.
   c. All other months checked OK.

PERSONNEL MONITORING SUMMARY DATA
FROM 4TH QUARTER 2008 TO 3RD QUARTER 2009

Personnel Monitoring Items:	Required Analysis:	Highest Result Obtained:	Allowable:
1. Semi-Annual or as needed personnel TLD (DDE)	Gamma (rem/yr)	NM	0.500 (Action Level)
2. Semi-Annual or as needed Bioassay	Total Uranium (ug/l)	NM	15-35 (Action Level)
3. Bi-Weekly or Quarterly air sample	Gross Alpha (uci/ml)	NM	6E –11 (DAC)
(Also note: Action Level is 10 % of an applicable dose limit)	TH-230 (uci) / ml	NM	6E –12 (DAC)
	RA-226 (uci/ml)	NM	3E –10 (DAC)
	PB-210 (uci/ml)	NM	1E –10 (DAC)
	RN-222 (uci/ml)	NM	4E –6 (DAC)
	(-Daughter)		
	U-Nat (uci/ml)	NM	2E –11 (DAC)

Personnel Exposure:

4. Estimated Annual Total Effective Dose Equivalent (TEDE):	TEDE (rem)	NM	5.0 (MAX.) 2.0 (Action Level)

NOTE: The above items are only required under an RWP as needed (see PMP, Rev. 4 on page 6 of 9). And no RWP was issued during this reporting period.

NM – Not Monitored

TABLE – 1

QUARTERLY LIQUID SAMPLES

Date/Qr.	Location	Type	Radionuclide	Concentration Mg/l	Concentration µci/ml	Error Est. µci/ml	LLD µci/ml
4th–Qr.2008	GW–3	Ground	U-Nat (dissolved) or total		9.82E–08		2.00E-10
to 3rd–Qr.		Water Well					
			Th-230 (dissolved) or total		7.00E–10	7.00E–10	2.00E-10
2009 Highest Result							
			Ra-266 (dissolved) or total		3.50E–10	1.10E–10	2.00E-10
UNC Field Data:	PH (STD. Units) = 6.59 Cond. (µ MHOS) = 5,490 Water Depth (Ft.) = 52.45 Temp. (°C) = 18.9		Pb-210 (dissolved) or total		2.60E–09	3.00E–09	1.00E-09
			Po-210 (dissolved) or total		Not Monitored		1.00E-09

COMMENTS: