# UNITED NUCLEAR CORPORATION



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March 26, 2009

Mr. Keith I. McConnell, Deputy Director
Decommissioning and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management
Programs
U.S. Nuclear Regulatory Commission
11545 Rockville Pike
#2 White Flint, Mail Stop T7 E-18
Rockville, MD 20852-2738

Re: Annual Land Use Report for 2008

Dear Mr. McConnell:

The above report is submitted, pursuant to our NRC Source Materials License No. SUA-1475, Condition 31.

Sincerely,

Max Chischilly, Jr. Radiation Safety Officer

DY:

Enclosure

Cc: Jack E. Whitten, NRC Region IV

Steve Hill, GE

Roy Blickwedel, GE Yolande Norman, NRC





# ANNUAL LAND USE SURVEY REPORT FOR 2008 UNITED NUCLEAR CORPORATION LICENSE NO. SUA – 1475 CONDITION NO. 31

MARCH 26, 2009



### SURVEY OF LAND OWNERSHIP AND USE WITHIN TWO-MILE RADIUS OF MILL SITE

## UNITED NUCLEAR CORPORATION License No. SUA-1475 Condition No. 31

### 1.0 Introduction

This report has been prepared pursuant to License Condition 31 of United Nuclear Corporation's License No. SUA – 1475. The information submitted in this report was acquired from the master title plate published by the Bureau of Land Management. United Nuclear Corporation maintains the Surface ownership records. The map is a copy of the USGS Quadrangle of Hardground Flats, Oak Springs, and Churchrock, the photo revised in 1979. United Nuclear Corporation's Radiation Safety Officer performed the land use survey.

# 2.0 Area Ownership and Use

Reference the attached map (figure 1) for location in regards to Mill Site.

Area:	Owner:	Usage:
Section 1	Navajo Tribe	Grazing and well monitoring
Section 2*	United Nuclear	Mill & Tailings site,
		one employee homesite and
	· ·	well monitoring.
Section 3	Navajo Tribe	Grazing and well monitoring
Section 4	Indian Allotted	Grazing
Section 6	Indian Allotted	Grazing
Section 9	Navajo Tribe	Grazing
Section 10	Indian Allotted	Grazing, eleven homesite,
•		and well monitoring
Section 11	Navajo Tribe	Grazing
Section 12	BLM, A, Etah, Etal	Grazing
Section 13	Navajo Tribe	Grazing
Section 14	Indian Allotted	Grazing
Section 15	Navajo Tribe	Grazing



Area:	Owner:	Usage:	
Section 33	Navajo Tribe	Grazing	
Section 34	BLM (western portion) United Nuclear (eastern portion)	Grazing	
Section 35	Indian Trust for	Grazing and UNC'S	
	Navajo Tribe	Reclaimed Northeast Churchrock Mine	
		Site is located in	
		this section.	
Section 36	United Nuclear	Unauthorized grazing and well monitoring.	
Map Northern	Navajo Reservation	Grazing, 24 home sites, and	
Portion of 2 mile radius		Quivira's reclaimed Church- Rock Mine site is located in	
2 mile facius		this area.	
Section 31	Indian Allotted	Grazing	

### \*Additional Note for Section 2:

The Mill has been decommissioned and has been cleaned to meet releasable standards for unrestricted use. Final reclamation activity on the tailings area was completed in 1996 with the exception of evaporation pond area, currently used for ground water remediation. Final cover radon flux test result was reported in the "Report On Radon Emanation Testing Of Final Radon Cover Over UNC'S Church Rock Tailings Site, Docket No. 40-80907" submitted on January 3, 1997.

- 3.0 Current ongoing groundwater tailings seepage remediation activity
  - 1) Sample/monitor wells on Sec. 2 and 36 (UNC), Sec. 1 and 3 (Navajo Tribe) and Sec. 10 (Indian Allotted) on a quarterly basis.
  - 2) Continual pumping/extraction of hydro fractured RW wells on UNC'S Sec. 36 as a way to enhance the remedy for cut off and containment of the migrating Zone 3 seepage impact water.
  - 3) Monthly monitoring for well NBL-1, NBL-2, PB-3, PB-4 and extraction well PB-2 and RW-A to track and locate the northern most migration extent of the seepage impacted water or plume in Zone 3 (Sec. 36).



4.0 Well ID, Use, Location and Formation

Well ID: United Nuclear	Use: Domestic	Location: Sec. 2-Mill Site	Formation: Westwater
Circle Wash	Domestic/ Livestock	Section 14	Alluvium
Unknown ID Abandoned	No Known Use	Section 11	Alluvium
J.E. Soper#1 Abandoned	No Known Use	Section 1	Two Wells- Members Mancos
BLM - 2	Monitor	Section 12	Alluvium
14T – 586 (Friendship well #	Livestock 1)	N.I.R. N Part of map	Lower Gallup
NR – 1	Monitor/ Inactive	N.I.R. N Part of map	Alluvium
15K – 303	Livestock	N.I.R. NE Part of Map	Upper Gallup

- 5.0 Significant change or event which took place since the March 28, 2008 Land Use Report for 2007
  - 1) No change under item 2.0 (Area ownership and Use) and item 4.0 (Well ID, Use, Location and Formation). Total current homesite is thirty-six within the two mile radius of mill site.
  - 2) 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.



- 3) 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.
- 4) 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 hill area (located 4.2 miles from mill site, T.16N, R15W, Sec. 17 and 20) 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.

