# UNITED NUCLEAR CORPORATION



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March 30, 2011

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 2010

Dear Mr. McConnell:

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

Sincerely,

May Challey

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 2010 UNITED NUCLEAR CORPORATION LICENSE NO. SUA – 1475 CONDITION NO. 31 MARCH 30, 2011



### 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 Navajo Tribe	Grazing and UNC'S Reclaimed Northeast Churchrock Mine Site is located in this section.
Section 36	United Nuclear	Unauthorized grazing and well monitoring.
Map Northern Portion of 2 mile radius	Navajo Reservation	Grazing, 22 home sites, and Kerr McGee's reclaimed Navajo Mine site is located in 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 wells RW-11, RW-16, RW-17, RW-A, PB-2, NW-1 NW-2. These wells are on UNC's Sec. 36 to enhance the remedy for cut off and containment of the migrating Zone 3 seepage impacted water.
  - 3) Monthly monitoring (i.e. measure field parameters, in-house bicarbonate and chloride titration test) of wells NBL-1, NBL-2, PB-2, PB-3, PB-4, RW-A and NW series 1 thru 5 to track the northern most migration of the seepage impacted water in Zone 3, Sec. 36.



## 4.0 Well ID, Use, Location and Formation

Well ID:	Use:	Location:	Formation:
United Nuclear	Domestic	Sec. 2-Mill Site	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 changes or events which took place in 2010 are as follows:
  - 1) No change under item 2.0 (Area ownership and Use) and item 4.0 (Well ID, Use, Location and Formation). Total revised current homesite is thirty-four within the two mile radius of mill site.



- 2) After the August, 2009 remedial construction activity (i.e. Interim Removal Action) on UNC'S NECR Mine Site in Sec 35 (Indian Trust Land) and adjacent Navajo Reservation Land; the following pertinent events or changes have since taken place in 2010.
  - Three households who were temporarily relocated to an off-site housing complex were moved back to their permanent home sites during January.
  - Re-seeding was done in January on project-impacted areas (i.e. Unnamed Arroyo, NECR 1 pile, Step out area outside Unnamed Arroyo and Sec 36 Borrow Area).
  - Enhanced final fencing and cattle guard installment were also completed in January to promote vegetation growth on re-seeded areas and to keep out livestock.
  - Soil erosion and sediment control methods were installed/implemented during the construction phase of the project (e.g. sediment retention pond, drainage swale, berm, silt fencing and/or staked straw bales). Thereby monthly and storm event inspections were/are done during and after construction for compliance with the National Pollutant Discharge Elimination System (NPDES), Best Management Practices, and Storm Water Pollution Prevention Plan (SWPPP).
  - During November and December erosion and sediment control construction repair and maintenance work were also done in Step-Out Area (sediment removal and berm reinforcement) and NECR -1 Pile (diversion dike berm and turf reinforcement).

