

URANIUM RESOURCES INC.

North Platte R & D Project

Decommissioning Plan

1.0 INTRODUCTION

Reclamation and decommissioning at the project will be conducted with the primary goal of protecting public health and safety and the environment while conserving the facilities at the project, in place, for use during the commercial phase of operation. Therefore, items such as the aquifer will be restored as stated in our groundwater restoration plan, the plant, tanks, valves, pumps and hardware will be cleaned as required by the NRC guidelines and solid waste, such as filters, sludge and soil will be reduced to the extent practical and disposed in a licensed tailings impoundment. All decommissioning will be recorded on the attached form.

2.0 PLANT AND FACILITY CLEANUP

2.1 Hardware

Items in this class include pumps, valves, meters, and, in general, those items which come into contact with lixiviant during production and restoration. Usually these items are plated out with radioactive material in conjunction with calcium carbonate. Therefore, items in this category will be cleaned by submersion into sulfuric or hydrochloric acid. Subsequent to submersion they will be rinsed with fresh water. After they are cleaned, they will be tested as will be discussed below. All fluids generated will be voided to the ponds.

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After all hardware is cleaned and tested, it will be stored and will remain within the plant building for future use during the commercial phase of the project.

2.2 Plant and Building

The plant, slab, and equipment which is too large or cannot, for other reasons, be submerged in acid will be scrubbed with a mild solution of hydrochloric or sulfuric acid. This will be followed by a detergent rinse, and finally a fresh water rinse. All fluids will be voided to the ponds. This process will be repeated until surface radioactive levels are within acceptable NRC standards.

3.0 SOILS

Because small drips may have occurred throughout the project, all soils will be decontaminated to levels consistent to those disclosed in Section 7.1 of this document. Steps will include reconnaissance check with a micro-R meter, soil removal, recheck with a micro-R meter, and finally, radiochemical testing for uranium and Ra_{226} .

Reconnaissance testing and calibration of the micro-R meter with respect to actual Ra_{226} and uranium levels will be the first step in soil cleanup. Four soil samples will be obtained, one from each area registering 10, 20, 30, and 40 micro-R/hr. These four soil samples will be analyzed radiochemically for Ra_{226} . Ra_{226} will then be plotted against micro-R/hr gamma radiation. All soil which emits gamma radiation and indicates greater than the maximum

level of Ra₂₂₆ will be removed. Soil removal will continue until micro-R levels indicate Ra₂₂₆ levels within soil are below the levels allowed for decommissioning. Final decommissioning of soil will be deemed complete when radiochemical analyses document Ra₂₂₆ and uranium levels are below those in Section 7.1.

4.0 PONDS

All water in the evaporation ponds will be hauled to Exxon for disposal. Within the bottom of all ponds is sludge and wind-blown sand. This sand will remain in place, after decommissioning, to prevent wind from blowing the liner away. Removal of the sand would not only remove the weight source which holds down the liner, but physically removing it may puncture the liner. The ponds will remain in place so they can be used as part of the commercial facility. All fencing will remain in place with the gate locked to limit access to the ponds.

5.0 SOLID WASTE DISPOSITION

A limited volume of LSA solid waste has been generated during operation of the R & D facility. These wastes include Cuno filters, sludge, contaminated rags, gloves, and coveralls. Also, the soil which is removed from the wellfield will be treated as a LSA waste.

All solid waste will be disposed of in a licensed disposal facility. Presently, URI plans to use Exxon's tailings pond for this purpose.

6.0 POST DECOMMISSIONING MONITORING

After the facility is decommissioned, including the wellfield restored and groundwater stability proven, limited monitoring of the evaporation pond area only will be required. Monthly, a URI representative will inspect the pond leak detection system to determine if leaks have occurred. If water is found during this test, a sample will be obtained and action will be taken as is presently specified within our license. Also, while the URI representative is on site inspecting the ponds, the plant, and other facilities will be inspected for vandalism. These changes in monitoring requirements will be preceded by a license amendment allowing for the changes.

7.0 DECOMMISSION LEVELS

7.1 Soils

<u>Nuclide</u>	<u>Average</u>	<u>Maximum</u>	<u>Source</u>
Ra ₂₂₆	5 pCi/g	5 pCi/g	EPA Interim Cleanup Standard
U/nat	2ppm/per 50 gr soil	5 ppm/per 50 gr soil	40CFR440.52

7.2 Surfaces

<u>Nuclide</u>	<u>Average</u>	<u>Maximum</u>	<u>Removable</u>
U/nat, U ₂₃₈ & assoc. decay prod.	5000 dpm α / 100CM ²	15,000 dpm α / 100 CM ²	1000 dpm α / 100CM ²

Source: USNRC, Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted use or Termination of License for Byproduct, Source or Special Nuclear Material.