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Uranium Legacy and Development Sites In New Mexico and the Navajo Nation

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This list identifies inactive or abandoned uranium legacy and current uranium development activities in New Mexico. The Uranium Legacy Sites portion of the list identifies activities at sites where exploration, mining and/or milling activities have ceased. The Uranium Development Sites portion of the list identifies sites with exploration applications or approvals, mine applications or approvals, and notices of intent to apply for an in situ or conventional mill uranium recovery license filed with the US Nuclear Regulatory Commission.

Links are current as of 02-26-2013.

I. Uranium Legacy – Inactive or Abandoned – Sites

A. Inactive and Abandoned Mines

1. New Mexico - The Abandoned Mine Land Program in the Mining and Minerals Division of the New Mexico Energy Minerals and Natural Resources department has identified 259 “uranium mine features” in the states – see <http://www.emnrd.state.nm.us/MMD/AML/amlmain.html>

EPA Region 6 is host for a New Mexico-focused Grants Mineral Belt uranium remediation program called “Addressing Health and Environmental Impact of Uranium Mining and Milling – see http://www.epa.gov/region6/6sf/newmexico/grants/nm_grants_index.html

2. Navajo Nation (including parts of New Mexico, Arizona and Utah) - EPA Region 9 is host for Navajo Nation focused uranium remediation program called “Addressing Uranium Contamination on the Navajo Nation” that includes addressing abandoned mines, contaminated structures, and contaminated water sources in the Arizona, New Mexico and Arizona portions of the Navajo Nation – see <http://www.epa.gov/region9/superfund/navajo-nation/>

a. Abandoned Mines – Abandoned mine aspects of the “Addressing Uranium Contamination on the Navajo Nation” Program hosted EPA Region 9 are identified at <http://www.epa.gov/region9/superfund/navajo-nation/abandoned-uranium.html>. The program is projected to provide for clean up efforts following the screening of 521 abandoned uranium mine are as identified in the EPA Report on the first five years of the project. Priority sites identified at that page, with links, include:

- Northeast Churchrock Mine – Coyote Canyon and Churchrock Chapters, NM;
- Mariano Lake Mine – Mariano Lake, NM;
- Quivira Mine – Coyote Canyon and Churchrock Chapters;
- Skyline Mine – Oljato Chapter, AZ/UT;
- Cove Transfer Stations – Cove and Red Rock Chapters – AZ/NM;
- Sections 32 and 33 – Casamero Lake Chapter, NM;
- Ruby Mines 1-4 – Pinedale and Smith Lake Chapters, NM; and
- 20 Mine Claims in the Cameron Area – Cameron Chapter, AZ.

b. Superfund Emergency Removal Actions – Three of these inactive uranium mines in New Mexico next to Navajo lands are subject to EPA Emergency Removal Actions – NE Church Rock – GE/UNC; Northeast Churchrock – Quivira/Rio Algom and Mariano Lake – Chevron/Gulf. Web pages are available the NE Churchrock GE/UNC and Quivira Mines at:

Northeast Church Rock Mine – General Electric/United Nuclear – Currently in Superfund emergency remediation process - see <http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/ViewByEPAID/NNN000906132>

Northeast Church Rock – Quivira Mines (former Rio Algom and Kerr-McGee) – Currently in Superfund emergency remediation process – see <http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/db29676ab46e80818825742600743734/22a4a391459e47b08825784d007ee6fd!OpenDocument>

c. Navajo Nation Offices involved in uranium mine and mill reclamation include:

- Abandoned Mine Land Reclamation – UMTRA (Uranium Mill Tailings Radiation Act) Department of the Navajo Nation home page - <http://www.aml.navajo-nsn.gov/>
- Navajo Nation Superfund Program - <http://www.nnepasuperfund.org/>
- Navajo Nation Environmental Protection Agency - <http://www.navajonationepa.org/>

II. Inactive Uranium Mill Tailings Sites

After license termination, inactive uranium mill tailings site ownership and responsibility is transferred to the Department of Energy Office of Legacy Management. Links for each uranium mill tailings site transferred to DOE ownership, or DOE responsibility (as is the case with Navajo Nation sites) are available (in the LM site search box) at http://www.lm.doe.gov/pro_doc/references/framework.htm.

Recent annual inspection and monitoring reports for Title I (inactive before 1978) and Title II (inactive after 1978) are available at http://www.lm.doe.gov/pro_doc/guidance_reports.htm.

A. Uranium Mill Tailings Sites without Completed Reclamation undergoing Superfund Remedial Actions

United Nuclear Corporation Mill Site (Churchrock Mill Tailings Site) – General Electric/United Nuclear - Superfund Site undergoing remediation – Remediation project operated under current NRC License and NMED Groundwater Discharge Plans; NRC License No. SUA-1475, Docket No. 40-8907 http://www.epa.gov/region6/6sf/newmexico/unity_nuclear/index.html

Grants Mill Tailings Reclamation Site – Homestake/Barrick -Superfund Site undergoing remediation Remediation project operated under current NRC License and NM Environment Department Groundwater Discharge Plans; NRC License No. SUA-1471, Docket No. 40-8903 Superfund Program page at http://www.epa.gov/region6/6sf/newmexico/homestake_mining/index.html

B. Uranium Mill Tailings Sites with Reclamation Completed except for Long-term Monitoring and Maintenance - UMTRCA Title II sites (active after 1978)

Ambrosia Lake Mill Tailings Site – Rio Tinto/Rio Algom formerly Kerr-McGee
- Ownership to be conveyed to Department of Energy

Bluewater Mill Tailings Site – Anaconda/ARCO
- Ownership conveyed to Department of Energy

L-Bar Mill Tailings Site – Rio Tinto Formerly SOHIO
- Ownership conveyed to Department of Energy following remediation

C. Uranium Mill Tailings Sites with Reclamation Completed except for Long-term Monitoring and Maintenance - UMTRCA Title I sites (inactive after 1978)

Old Phillips Mill Tailings Site - NM – Reclamation funded by Federal Government - Ownership conveyed to US Department of Energy following remediation

Shiprock Mill Tailings Site – in NM portion of Navajo Nation - Reclamation funded by Federal Government - Ownership retained by Navajo Nation with long-term stewardship by US Department of Energy

Tuba City Mill Tailings Site – In Arizona portion of Navajo Nation - Reclamation funded by Federal Government - Ownership retained by Navajo Nation with long-term stewardship by US Department of Energy

Mexican Hat Mill Tailings Site - In Arizona portion of Navajo Nation - Reclamation funded by Federal Government - Ownership retained by Navajo Nation with long-term stewardship by US Department of Energy

Monument Valley Mill Tailings Site - In Arizona portion of Navajo Nation - Reclamation funded by Federal Government - Ownership retained by Navajo Nation with long-term stewardship by US Department of Energy

III. New Mexico Proposed or Active Uranium Exploration, Mining and Milling Project Status

Exploration Permit Applications are filed with NM Mining and Minerals Division (MMD), part of the New Mexico Energy, Minerals and Natural Resource Department.

Exploration and Mine Plans of Operations on Forest Service land (federal land) are filed with the US Forest Service. All uranium development projects on Forest Service land in New Mexico are with the Cibola National Forest.

Projects listed are as identified on 02-26-2013 at New Mexico Mining and Minerals Division Pending applications page – at <http://www.emnrd.state.nm.us/MMD/MARP/MARPPermitsRevModClose.html>. MMD's pending applications pages may not reflect all currently filed documents.

Cibola National Forest Summary of Proposed Actions is at <http://www.fs.fed.us/sopa/forest-level.php?110303>

Additional New Mexico uranium projects without applications to MMD or USFS are identified at <http://www.wise-uranium.org/uosanm.html>.

A. MMD-Listed Uranium Exploration, Mining and Milling Pending Applications and Permits

1. Minimal Impact Exploration - MMD lists five Minimal Impact Uranium Exploration Project Applications – All in Catron County

- Deer Claims Exploration Project – Vane Minerals, Tucson, AZ - CA014EM – most recent document 05-11-2009
- Deer Claims Reentry Project – Frank Bain Flagstaff, AZ - CA020EM – most recent document – 04-04-2010
- Red Basin Project – Red Basin LLC, Regina, Sask. CA021EM – most recent document – 04-25-2011
- Webster Project – Red Basin - CA022EM – most recent document – 04-25-2011
- Down-Dip Project – Red Basin - CA023EM – most recent document – 04-25-2011

2. Exploration - MMD lists one Regular Uranium Exploration Application – in Cibola County:
- Cebolleta Exploration Project – CI014ER – most recent correspondence – 01-22-2013 – Public Notice of for Permit Renewal Completed. No other documents listed on MMD site.

3. Uranium Mine Applications - MMD list three Regular Uranium New Mine Applications – Two in Cibola County and one in McKinley County:

- La Jara Mesa Mine – Laramide Resources - CI008RN – most recent correspondence – 08-2010 Agency Comments on Sampling and Analysis Plan
- Cebolleta Mine – Neutron Inc. (now owned by Uranium Resources, Inc.) – CI009RN – most recent correspondence – 3-26-2012 – Sampling and Analysis Plan – no other documents listed.
- Roca Honda Mine – Roca Honda Resources (60% Strathmore/40% Sumitomo) – MK025RN – most recent correspondence – 10-2012 – Roca Honda Baseline Data Report REV1

4. Uranium Mine Permits - MMD lists three Regular Uranium Existing Mine Permits in McKinley County:

- Mt. Taylor Mine – Rio Grande Resources (100% owned by General Atomics) - CI002RE – most recent documents – 02-25-2013 – Request for Public Hearing on Closeout/Financial Assurance Update.
- Section 27 Mine – United Nuclear Corporation (now owned by General Electric) – MK005RE – Most recent document – 06-24-2011 – Section 27 Mine Supplemental Closeout Plan
- St. Anthony Mine – United Nuclear Corporation (now owned by General Electric) – MK006RE – most recent document – 09-17-2010 – Sta. Anthony Closure/Closeout Cost Estimate
MMD lists one Regular Uranium Exploration Existing Permit in McKinley County:
- Marquez Canyon Exploration – Neutron Energy (now owned by Uranium Resources, Inc.) – MK023ER – most recent document – 04-10-2012 – Approval of Permit Renewal

B. Cibola National Forest Summary of Proposed Action (SOPA)-Listed Uranium Projects

From January (SOPA) at <http://www.fs.fed.us/sopa/forest-level.php?110303>

1. Mt. Taylor Ranger District

- Eric #1 Project – CE – “In Progress 215 Comment Period Legal Notice 05/08/2012” – “Drilling up to 2 holes from 2 drill pads” – NEPA link - http://www.fs.fed.us/nepa/nepa_project_exp.php?project=37787
- La Jara Mesa Mine Development Project – EIS - Laramide Resources – “In Progress – DEIS Available in Fed Reg. 05/18/2012; Est. FEIS Notice in FR 08/2013” – Proposal to dig tunnels to access bulk samples and develop mine - NEPA link - http://www.fs.fed.us/nepa/nepa_project_exp.php?project=25654
- Roca Honda LLC Exploration and Mine Development Project – Roca Honda Resources - EIS – “In Progress Notice of Intent to Issue EIS 11/24/2010, Est. DEIS Available in FR 03/2013” – Proposal to develop and conduct underground uranium mining. – NEPA link - http://www.fs.fed.us/nepa/nepa_project_exp.php?project=18431
- Uranium Exploration Drilling – EIS – “In Progress NOI in FR 12/08/2011, Est. DEIS NOA in FR 08/2013 – “Proposal to approve multiple Plans of Operations for exploratory drilling to determine the extent of uranium deposits in several areas on the mesas surrounding Mt. Taylor” – NEPA link - http://www.fs.fed.us/nepa/nepa_project_exp.php?project=33948

2. Datil Ranger District

- Deer Claim Uranium Exploration Project – “CE” – Categorical Exclusion – “in Progress 215 Comment Period Legal Notice 05-16-2012 – Up to 50 historic holes will be reentered.
- Divide Mineral Exploration Project – CE – “Developing Proposal Est. Scoping Start 02/2013” – “drill 4 holes approx. 400 feet deep.”
- Down-Dip Project – CE – “Developing Proposal Est. Scoping Start 03/2013.” – “Drill six holes...”

C. NRC-Identified Uranium Recovery Licenses or Notices of Intent to File Applications

From NRC "Major Uranium Licensing Applications" - 02-01-2013

at <http://www.nrc.gov/materials/uranium-recovery/license-apps/ur-projects-list-public.pdf>

- Uranium Energy Corporation – Grants Ridge Project – Heap Leach – New – Application Date to be determined – Letter of Intent to NRC – 01/15/10
- Strathmore Minerals (through Roca Honda Resources – 60% Strathmore, 40% Sumitomo Partnership) – Pena Ranch – 1,500 ton per day capacity conventional mill – Est. Application Date – 12/2013 – Letter of Intent – 01/17/2013 – Pre-Submittal Audit 12/2012 – NRC Docket No. 40-9071
- Uranium Resources, Inc. (Formerly Neutron Energy) – Juan Tafoya – Conventional mill – Est. Application Date FY 14 – Letter of Intent 03/02/2012 – NRC Docket No. 40-9081
- Rio Grande Resources (100% owned by General Atomics) – Mt. Taylor – Conventional mill – Est. Application Date – FY 14 – Letter of Intent 10/29/2012 – NRC Docket No. 40-8908, 40-9070

D. NRC Issued Currently Licensed Uranium In-Situ Recovery Project

- Hydro Resources, Inc. (Owned by Uranium Resources, Inc.) – Crownpoint – In-Situ Recovery License Renewal – Application Received 08/02, on hold until FY13 – Pre-Submittal Audit 09/2012 – includes Churchrock Section 8 and Section 17 In-situ- projects - NRC License No. SUA-1508 - NRC Docket No. 40-8968

V. Sources

This information has been compiled sources listed including:

- WISE Uranium Project – www.wise-uranium.org
- Mining and Mineral Division of New Mexico Energy, Minerals and Natural Resources Department List of Pending Applications and Approvals - <http://www.emnrd.state.nm.us/MMD/MARP/MARPPermitsRevModClose.html>
- Cibola National Forest – Summary of Proposed Activities (SOPA) – current SOPA at <http://data.ecosystem-management.org/nepaweb/current-sopa.php?forest=110303>
- New Mexico Environment Department – Groundwater Protection Bureau Mining Environmental Compliance Section - <http://www.nmenv.state.nm.us/gwb/NMED-GWQB-MiningEnvironmentalComplianceSe.htm>
- US Nuclear Regulatory Commission – Status of proposed applications at <http://www.nrc.gov/materials/uranium-recovery/license-apps/ur-projects-list-public.pdf>

EPA Region 6 and Region 9 sources as identified.

Additional information can found by inquiries to

- Regulatory agencies
- Southwest Research and Information Center – www.sric.org
- MASE (Multicultural Alliance for a Safe Environment) Coalition -
- Companies associated with legacy or development sites.