

Rio Tinto

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21 January 2018

Mr. Gregory Suber, Acting 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. Regulatory Commission
11545 Rockville Pike, Mail Stop T7-E18
Rockville, MD 20852-2738

Dear Mr. Suber:

Subject: Sweetwater Uranium Project - Docket Number 40-8584
Source Materials License #SUA-1350 -- License Conditions 11.2 and 12.3
Land Use Report

In compliance with License Conditions 11.2 and 12.3 of SML SUA-1350, Kennecott Uranium Company has conducted visual surveys throughout the year (2017) of land use in, and within a five-mile radius of, the Sweetwater Uranium Project. The primary land uses in the area are mineral development (including uranium and oil and gas), grazing (including cattle, sheep, feral horses, and wildlife) and recreation (including hunting and camping). Other ancillary activities are electricity transmission, gas transmission and livestock and wildlife watering wells.

Surveys were made on January 30th, April 11th, 18th, May 9th, 10th, 23rd, 30th, June 7th, 13th, 28th, July 5th, 6th, 10th, and 11th, August 23rd, September 5th, 6th, 7th, 11th, 12th, 13th, 14th, 17th, 18th, 19th, 20th, 21st, and 26th and November 2nd, 2017. All except the January 30th, April 11th, and 18th and November 2nd surveys were made while performing other activities in the area such as the collection of water levels.

The surveys conducted January 30th, April 11th, April 18th and, and November 2nd, 2017 included a collection of photographs. The surveys conducted on May 9th, 10th, 23rd, 30th, June 7th, 13th, 28th, July 5th, 6th, 10th and 11th, August 23rd, September 5th, 6th, 7th, 11th, 12th, 13th, 14th, 17th, 18th, 19th, 20th, 21st and 26th, 2017 were conducted concurrently with other activities specifically regional water level data collection. The locations of watering wells (identified by type of pump), gas development, uranium exploration/development activity, and livestock activity are shown on the included map. In addition, observations were made throughout the entire year as site personnel traveled around the area.

Cattle and sheep grazing occur in the area. Cattle are almost always present east of the facility along the paved access road (Sweetwater County Road 63). One (1) sheep camp was established in the area in January 2017 and was extant until April 2017. It is labeled Sheep Camp #1 and is shown on the map.

Hunting of big game wildlife occurs during the fall throughout the area. Pronghorns are regularly observed around the site as shown in Image 14. The area is also used intermittently for recreational camping.

Oil and gas development and production continue as a principle land use in the area. A twenty-four (24) inch buried gas pipeline and other gas development activities are shown on the map. There has been noticeable oil and gas drilling activity to the west, north and south of the facility, creating additional traffic along Sweetwater County Road 4-23 south of the facility. Substantial additional oil and gas activity has been observed South of Circle Bar Lake and East of Sweetwater County Road 63. Uranium exploration drilling and well completion work has been conducted approximately four miles due north of the facility by UR-Energy. The facility known as their Lost Creek Project commenced operation in August 2013. Their areas of operation including three (3) areas containing wells are shown on the attached map. Extensive uranium related claim staking has been done in the past within a five mile radius of the facility, primarily to the north and west.

A 230 Kv power line from the Jim Bridger Power Plant passes through the area. A 34.500 Kv power line feeds the Sweetwater facility from the North and is shown on the map.

The Lost Creek ISR Project is North and slightly East of the Sweetwater Uranium Project. Features related to it are shown on the map.

These items are shown on the attached map entitled "*Sweetwater Uranium Project – Land Use Report Map*", provided that they are within the map's borders. Photographs of some of these items and other items are provided, attached.

A tie-in to the main North-South gas line following and lying west of the Wamsutter to Jeffrey City Road from the above described booster station is shown in Image 3.

An oilfield and associated equipment in the Southwest $\frac{1}{4}$ of Section 13, Township 23 North, Range 94 West is shown in Image 4.

A gas booster station related to gas development in the area has been installed west of the facility that is now being dismantled and is shown on the map.

A newly completed oil well in the Southeast $\frac{1}{4}$ of Section 19, Township 23 North, Range 93 West is shown in Image 6. The Sweetwater Uranium Project can be seen in the background/center of this image. Hansen Lake can be seen in the center of the right hand side of this image.

A newly completed oil well and associated pond in the Northwest $\frac{1}{4}$ of Section 29, Township 23 North, Range 93 West is shown in Image 8.

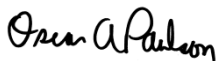
A Google Earth image of the area is included with this report.

Mill operations remain suspended. There are two mobile homes near the south edge of the site's chain link fence. The resident caretaker uses one home for approximately four (4) days out of each week and a security guard uses the other trailer, the mobile home closest to the chain link fence, approximately three days of each week. The security guard is considered the nearest resident for purposes of dose calculation and estimation as per the e-mail from James Webb – Nuclear Regulatory Commission (NRC) Project Manager dated Monday, February 28, 2011.

The Sweetwater Uranium Project's potable water wells are the only drinking water sources within five (5) miles of the facility. The Bureau of Land Management (BLM) maintains three water wells with tanks for livestock and wildlife watering along Sweetwater County Road 63 (one mile southeast, four miles east and five miles northeast of the facility) as well as at least seven (7) wells equipped with solar powered submersible pumps for livestock and wildlife watering in the area. Those wells within the map's borders are shown on the attached map. One (1) of the wells along Sweetwater County Road 63 (Road Well #4) lies within the bounds of the map and is shown. These Bureau of Land Management wells are either up gradient of the Sweetwater Uranium Project area in regard to the regional ground water gradient or so distant as not to be impacted by operations.

If there are any questions regarding this report please contact me at (307) 328-1476 or (307) 324-4924.

Sincerely yours,



Oscar Paulson
Facility Supervisor/RSO

cc: J. Webb, Project Manager (NRC)
Director, DRSS (NRC) - Arlington, TX
Rich Atkinson

DIESEL CONTAMINATED SOIL EXCAVATION

The excavation was completed in March 2003. A sign-off letter and page changes to the report submitted in February 2003 to make it a final report were submitted on July 31, 2003. The excavation is still open pending remediation of the land-farmed soils to the 100-milligram per kilogram clean soil standard, at which point they can be used as backfill. The average concentration in the land-farmed soils was 23.5 milligrams per kilogram in September 2008; however, some samples are still above the 100-milligram per kilogram clean soil standard.

The State of Wyoming Department of Environmental Quality, Land Quality Division, reviewed the sample data submitted for the land farm in their 2006 Annual Inspection Report and Annual Report Review, stating:

“Since Kennecott has followed the permit (i.e. pages I-55 through I-60 in the Mine Plan) in all its land farming procedures at Permit 481, the company is authorized to remove the materials from the portions of the land farm noted in Appendix 13 of the 2005/2006 Annual Report as having DRO concentrations of 100 ppm or less.”

Thus, Kennecott Uranium Company can remove land farmed material from grids with a Diesel Range Organic concentration of 100 parts per million or less and backfill that material into the open excavation.

Images



Image 1 – UR Energy Lost Creek Project – Deep disposal well building in Section 25, Township 25 North, Range 93 West – December 14, 2015



Image 2 – Panorama of Sheep Camp #1 taken on January 30, 2017



Image 3 - Tie-in from compressor station to the main North-South gas line following and lying west of the Wamsutter to Jeffrey City Road



Image 4 – Oilfield equipment Southwest ¼ Section 13, Township 23 North, Range 94 West – November 15, 2016



Image 5 – Oilfield compressor/booster station being dismantled approximately five (5) miles West of the facility (Section 15 Township 24 North, Range 94 West) – November 2, 2017



Image 6 – BP America Chain Lakes Well No. 19-1 in the Southeast ¼ of the Southeast ¼ of Section 19, Township 23 North, Range 93 West. Image taken on November 2, 2017. The Sweetwater Uranium Project is visible in the center background of this image.



Image 7 – Detail of panorama above showing Sweetwater Uranium Project in background. Image taken on November 2, 2017



Image 8 – Recently added oilwell and pond in Northwest ¼ of Section 29, Township 23 North, Range 93 West



Image 9 – Feral horses – April 18, 2017



Image 10 – Pronghorns southwest of site – November 15, 2016



Five (5) Mile Radius
Google Earth – June 8, 2014