



September 30, 2013

Mr. Andrew Persinko  
Division of waste Management & Environmental Protection  
Office of Federal & State Materials & Environmental Management Programs  
Mail Stop T-8F5  
U.S. Nuclear Regulatory Commission  
11545 Rockville, Maryland 20852-2738

Re: Docket No. 40-2259, License No. SUA-672

Dear Mr. Persinko:

Condition 22 of the referenced license requires the submittal of the results of effluent and environmental monitoring in accordance with 10 CFR 40.65. This is to advise you that no effluent or environmental monitoring was done during the first and second quarters of 2013 at the Lucky Mc tailings site, consistent with amendment number 64 to the license. The ground water monitoring results for the first and second quarters, 2013 were submitted to the NRC in September 27, 2017 in a separate report pursuant to condition 60 of the license. Enclosed is the annual land use survey required by condition 21 of the license.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Mark Owens', is written over a horizontal line.

R. Mark Owens  
General Manager

Encls.

cc: D. B. Spitzberg, U.S. NRC – Region IV

PATHFINDER MINES CORPORATION

935 PENDELL BLVD., P.O. BOX 730 MILLS, WYOMING 82644, U.S.A.  
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PATHFINDER MINES CORPORATION  
Lucky Mc Mine  
SUA-672, License Condition No. 21

Annual Land Use Survey Report  
September 30, 2013

General land uses within five miles of the Lucky Mc restricted area boundary:

Land uses during 2012-2013 within five miles of the Lucky Mc restricted area boundary did not change significantly from what was reported for the previous year. Cattle and sheep have been grazing on the adjacent open range during late spring through the fall when they are typically removed for the winter.

Pathfinder activities over the past year relating to the restricted area included periodic monitoring of the site status (the tailings site had been reclaimed a number of years ago), control of noxious weeds, and quarterly well sampling. The erosion control work accomplished during reclamation of the site continues to perform very well.

The nearest (and only) full-time residence is located 5.9 miles to the north-northwest of the northwest corner of the restricted area fence. Two adult individuals live part-year at the site, and they utilize a domestic water well. No other potable water source was utilized in the general area this past year. Livestock and wildlife continue use of stock watering ponds which occur within five miles of the restricted area boundary. The closest such pond to the restricted area, the mine runoff settling pond immediately to the east of Tailings Pond #1, was fenced during the spring, 2003, to temporarily exclude cattle from the pond and the adjacent reclamation. The dam for that pond was intentionally breached in late 2005 as part of the mine reclamation. However, there is residual storage capacity in that pond below the breach spill elevation. The residual pond was re-permitted in 2010 with the Wyoming State Engineer as a stock watering source. This was done in anticipation of eventual site transfer to the U.S. Department of Energy since the pond will be within the transfer area. There is a stock watering well located just east of Reid Draw some two miles north of the north end of the restricted area. Of significance, title to the transfer area property was deeded to the U.S. Department of Energy in 2010.

No uranium mining occurred during the past year in the Gas Hills. Pathfinder's activities at its mine site to the south of the restricted area were limited to mine monitor well sampling and routine reclamation repairs. Related reclamation activity by the Abandoned mine program included the installation of a monitoring well in Section 26 T33N R90W approximately 3 mile south southwest of the former tailings site.

There has been continued uranium claim maintenance in the Gas Hills in recent years, and at least one company continues to evaluate the feasibility of starting a conventional open pit or underground uranium mine to the south of the Lucky Mc mill and tailings site on ground adjacent to Lucky Mc Mine and has submitted applications to regulatory bodies. Related to that activity there have been various claims staked on Federal land primarily to the south of the eventual Gas Hills North (Lucky Mc) site transfer boundary. That company continues to do baseline environmental monitoring, confirmation drilling, and other related activities in support of their application for a mine permit to the Wyoming Department of Environmental Quality.

A second company has been issued a permit to mine by the WDEQ and conditional license from the USNRC for an ISR operation centered on the former Carol Shop site southeast of the

2012-2013 Land Use Survey, SUA-672, page 2.

Gas Hills North (Lucky Mc) site. That project has achieved regulatory approval but to the knowledge of Pathfinder is not currently in development.

The primary recreational use of the subject area continued to be the sport hunting of antelope, deer, and sage grouse during the fall months; cottontail rabbits and coyotes from fall through winter; and prairie dogs throughout the year.



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11545 Rockville, Maryland 20852-2738

Re: Docket No. 40-6622, License No. SUA-442

Dear Mr. Persinko:

Condition 22 of the referenced license requires the submittal of the results of effluent and environmental monitoring in accordance with 10 CFR 40.65. This is to advise you that no effluent or environmental monitoring was done during the first and second quarters of 2013 at the Shirley Basin tailings site, consistent with amendment number 52 to the license.

The ground water and surface water monitoring results for the first and second quarters of 2013 were submitted to the NRC under separate cover during September 27, 2013, pursuant to condition 47C of the license. Enclosed is the annual land use survey required by condition 21 of the license.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Mark Owens', written over a horizontal line.

R. Mark Owens  
General Manager

Encls.

cc: D. B. Spitzberg, U.S. NRC – Region IV

PATHFINDER MINES CORPORATION

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Annual Land Use Survey  
2012-2013  
Pathfinder Mines Corporation  
Shirley Basin Mine  
Source Material License SUA-442

September 30, 2013

Pursuant to condition 21 of Source Material License SUA-442, a review of the land use status within five miles of the restricted area boundary was conducted. There were no significant changes in land use over the past year compared to what was described in the last survey report. Aside from the Heward Ranch noted below, there were no private residences within five miles of the site. To our knowledge, no new private or public potable water or agricultural wells were completed within five miles of the restricted area boundary. Activities at the Pathfinder site consisted of routine licensed 11e.(2) waste disposal in the tailings area, minor site maintenance such as road grading, minor repairs of mine reclamation, fence repairs, annual noxious weed spraying in the mine area, and ground water monitoring within both the restricted area and the adjacent mine area.

The primary agricultural use of adjacent lands was cattle and sheep grazing. The Heward Ranch, some three miles southeast of the restricted area, continued to be the nearest agricultural residence. Grazing utilization did not change appreciably from the previous year. Wildlife such as pronghorn antelope, deer, eagles (both golden and bald); fox, coyote, and elk, use the site commonly and occasionally spotted are moose and sage grouse. Various other non-game species continue to utilize the habitat available in the general area.

No new nonresidential structures were built within the area of concern, and uses of existing structures did not change. There was no appreciable mineral claim staking activity in the general area on Federal land since most available areas of interest previously had been claimed.

Limited recreational utilization of the public lands adjacent to the restricted area continued in the form of hunting, primarily during September-October. The Walker-Jenkins Pit, reclaimed by the Abandoned Mine Lands Program as a lake, remains open to public access for fishing. The lake is located south-southeast of the Pathfinder site.

The nearby Petrotomics tailings/mine site remains under the stewardship of the U.S. Department of Energy.