

Department of Energy Office of Legacy Management

DEC 1 3 2005

Mr. Mark Thiesse, West District Supervisor GPC Program, Water Quality Division Wyorning Department of Environmental Quality 510 Meadowview Drive Lander, WY 82520

Subject: Draft Final Long-Term Surveillance Plan for the Gas Hills North (UMTRCA Title II)

Disposal Site, Fremont County, Wyoming

Reference: Letter to Mr. Thomas C. Pauling, Department of Energy, from Mark Thiesse,

Department of Environmental Quality, Dated June 8, 2005, Same Subject

Dear Mr. Thiesse:

The Department of Energy (DOE) has reviewed the referenced letter from the Wyoming Department of Environmental Quality (DEQ) containing comments on the subject document. The comment responses provided below are numbered to correspond to the comments as provided by DEQ in the referenced letter.

In a general statement at the beginning of the provided comments, DEQ references a Memorandum of Understanding (MOU) and a draft long-term stewardship guidance document as additional resources used in the review. Unfortunately, these two documents are not pertinent to sites licensed by the Nuclear Regulatory Commission (NRC). As you will note, the NRC was not a party to the MOU. Also, there is a separate NRC-approved DOE guidance document (DOE 2001) that addresses long-term surveillance plans (LTSPs) for NRC-licensed sites under the jurisdiction of the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA). A copy of this document is enclosed for your convenience and future reference.

Specific Comments:

1. DEQ took exception to DOE's characterization of water quantity and quality in the Cody Shale formation ("meager quantities of poor quality water"). DOE obtained this characterization from a United States Geological Survey (USGS) report compiled in conjunction with the Wyoming State Engineer's Office (Whitcomb and Lowry 1968). After further inquiry, DOE concurs with DEQ in that specific instances of adequate yields allowing domestic use of the water from the Cody Shale formation do occur in the Lander Valley. Therefore, DOE will include a footnote in the LTSP citation noting the possibility of adequate yields from the Cody Shale formation in the Lander Valley.

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- 2. It is standard practice for DOE site inspectors to look for water well development on adjacent properties. A statement will be added to the LTSP for clarification.
- 3. The State will receive a copy of the annual report.
- 4. The other ground water protection standards are established by the NRC (NRC 2002). A footnote or a sentence in the text will be added stating this.
- 5. The NRC Part 40 Statements of Consideration for the 10 CFR 40 rulemaking (NRC 1992) states that...evaluative monitoring will quantify the rate and magnitude of the change of conditions...

States can always review and comment on NRC actions.

6. The referenced guidance document is inappropriate for the NRC-licensed UMTRCA sites. A copy of the appropriate guidance document is enclosed for your reference.

It is not the purpose of the LTSP to define corrective actions. The LTSP provides the process for determining if corrective action is necessary, but corrective action itself requires specific authorization from the NRC. (See Part 40 Statements of Consideration, page 40-SC-16, center column, NRC 1992.)

- 7. See Number 2 above.
- 8. The ground water monitoring plan and network is based on the NRC Alternate Concentration Limit (ACL) application approval (NRC 2002) and the hydrologic site characterization conducted by the licensee to support the ACL application (Hydro-Engineering, LLC 2002). Please refer to those documents for explanations of the hydrologic setting and monitor well strategy. The final ground water monitoring network configuration is still pending as DOE and NRC are continuing discussion on the matter.
- 9. As stated in 6 above, the referenced guidance document is not appropriate for NRC-licensed UMTRCA sites. For example, regarding "exit strategies," there is no exit strategy for an UMTRCA site. The federal government's responsibility is perpetual (10 CFR 40.28(b)).

Enclosed, for your reference, is the *Guidance for Implementing the Long-Term Surveillance Program for UMTRCA Title I and Title II Disposal Sites, April 2001*. Please call me at (970) 248-6048 if you have any questions.

Sincerely,

Thomas C. Pauling

Site Manager

Enclosure:

cc w/o enclosure:

T. Hardgrove, Pathfinder Mines Corp. G. Janosko, NRC

M. Plessinger, Stoller
Project File: GHN-000 (D. Roberts)

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References

10 CFR 40.28 (b). Code of Federal Regulations, 10 CFR Part 40.28, General license for custody and long-term care of uranium of thorium byproduct materials disposal sites.

Hydro Engineering, LLC, 2002. Application for Alternate Concentration Limits Pathfinder Mines Corporation, Lucky Mc Tailings. Prepared for Pathfinder Mines Corporation Lucky Mc Mine License No. SUA-672, Docket No. 40-2259, January.

U. S. Department of Energy (DOE), 2001. *Guidance for Implementing the Long-Term Surveillance Program for UMTRCA Title I and Title II Disposal Sites*, prepared by the U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado, GJO–2001–215–TAR, April 2001.

U.S. Nuclear Regulatory Commission, 2002. Letter to Mr. T.W. Hardgrove, Pathfinder Mines Corporation, from Daniel M. Gillen, Chief, Fuel Cycle Facilities Branch, U.S. Nuclear Regulatory Commission, approving the proposed use of alternate concentration limits for ground water at Pathfinder Mines Corporation's Lucky Mc Site, December 20.

NRC 1992. Code of Federal Regulations, United States Nuclear Regulatory Commission, Rules and Regulations, Part 40, Domestic Licensing of Source Material, Statements of Consideration.

Whitcomb, Harold A. and Marlin E. Lowry, 1968. Ground-Water Resources and Geology of the Wind River Basin Area, Central Wyoming. United States Geological Survey Hydrologic Investigations Atlas HA–270.