



The State
of Wyoming



Department of Environmental Quality

Jim Geringer, Governor

Herschler Building • 122 West 25th Street • Cheyenne, Wyoming 82002

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| ADMIN/OUTREACH (307) 777-7758 FAX 777-3610 | ABANDONED MINES (307) 777-6145 FAX 777-6462 | AIR QUALITY (307) 777-7391 FAX 777-5616 | INDUSTRIAL SITING (307) 777-7369 FAX 777-6937 | LAND QUALITY (307) 777-7756 FAX 777-5864 | SOLID & HAZ. WASTE (307) 777-7752 FAX 777-5973 | WATER QUALITY (307) 777-7781 FAX 777-5973 |
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January 3, 2003

U.S. Nuclear Regulatory Commission
Document Control Desk
Mailstop T8 A33
11545 Rockville Pike,
Rockville, MD 20852-2738

Attn: Mr. Daniel M. Gillen, Chief

RE: Request for Classification of Groundwater, Pathfinder Shirley Basin Facility

Dear Mr. Gillen:

In her December 2, 2002 e-mail, Ms. Elaine Brummett with the Nuclear Regulatory Commission (NRC) requested that the WDEQ/WQD perform a groundwater classification for the Pathfinder Shirley Basin Facility, specifically sections 26 and 27 in T28N, R78W, Carbon County, Wyoming. The NRC is making this request to help determine if the alternate concentrations limits (ACLs) proposed by Pathfinder will be protective of human health and the environment at the point of exposure.

For the purpose of protecting human health and the environment at any potential point of exposure (i.e. DOE's Long-term Care Boundary), the concentration of any hazardous substance (e.g. radio nuclides) in groundwater migrating past the Shirley Basin LTCB cannot exceed the greater of its ambient concentration, or its Maximum Contaminant Level (MCL - Primary or Secondary) if one has been established under the federal Safe Drinking Water Act. Please remember that the US EPA has revised its MCL for uranium to .03 mg/l.

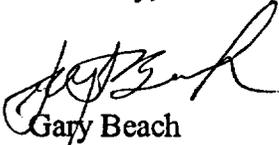
For non-hazardous substances (e.g. sulfate, chloride, Total Dissolved Solids, etc.) it appears that the ambient concentrations of most, if not all, constituents in groundwater associated with the facility fall below Wyoming's upper limit for Class I groundwater as established in Table 1 of Chapter 8, Wyoming Water Quality Rules and Regulations. For the purpose of protecting human health and the environment at any potential point of exposure (i.e. DOE's Long-term Care Boundary), the concentration of any non-hazardous substance in groundwater migrating past the Shirley Basin LTCB cannot exceed the greater of its ambient concentration, or the Class I upper limit.

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Please feel free to contact me at 307-777-7781, should you have any questions.

Sincerely,



Gary Beach
Administrator
Water Quality Division

GB/KF/pjb
3-0004-ltr

c: Elaine Brummett, NRC
Rick Chancellor, LQD Administrator, Cheyenne
Kevin Frederick, WQD Cheyenne
Mark Thiesse, WQD Lander
Roberta Hoy, LQD Cheyenne