GWOU ADMINISTRATIVE RECORD
SECTION TITLE:
GW-300-303-1.12

JUN 25 2003

Mr. John D. Hoskins
Director
Missouri Department of Conservation
P.O. Box 180
Jefferson City, MO 65102-0180

Dear Mr. Hoskins:

REVIEW OF DRAFT PROPOSED PLAN FOR GROUNDWATER DATED APRIL 30, 2003

This is in response to your letter concerning the draft *Proposed Plan for the Final Remedial Action for the Groundwater Operable Unit at the Chemical Plant Area of the Weldon Spring Site*. We would like to take this opportunity to address some of the issues you raised. We will provide detailed responses to your comments as well as those from the Environmental Protection Agency and the Missouri Department of Natural Resources, which included a consolidated review from the Missouri Department of Transportation and the Missouri Department of Health and Senior Services.

Before responding to your concerns, the Department of Energy (DOE) wants to express our appreciation for your sustained cooperation over the past 17 years. In the spirit of cooperation, we have been able to achieve cleanup and improve the status of the site and your State owned properties. Specifically, Missouri Department of Conservation (MDC) has: provided unconditional access to its properties for monitoring and remedial activities; and used science rather than politics to determine appropriate signage. DOE has constructed wetlands on MDC properties; initiated over 200 acres of prairie planting on both DOE and MDC properties; converted a borrow area sedimentation basin to a fishing lake; and conveyed ownership of the borrow area maintenance facility. Jointly we have worked to construct a hike and bike trail connecting the Katy Trail to the August A. Busch Memorial Conservation Area. We certainly hope that despite the concerns you have recently expressed regarding groundwater, that we will continue to cooperate in maintaining the environmental remedies and in other areas when our missions overlap.

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The DOE has completed a massive cleanup effort at the Weldon Spring site costing the taxpayers almost $900,000,000. This effort has resulted in the excavation and permanent disposal of approximately 1.5 million cubic yards of contaminated material. The isolation of this waste has removed the sources that were contaminating the groundwater and has already led to reductions in the groundwater contamination. An example of this is the decline in uranium and nitrate contamination at Burgermeister spring on MDC property.

DOE has performed comprehensive investigations to understand the extent of contamination in the groundwater and the geology that dictates groundwater flow patterns. We have examined numerous technologies, which had the potential to clean up the groundwater and have implemented two of these on pilot scales. We have also extensively evaluated the groundwater flow and evaluated the potential risk to future users. DOE has concluded that it is not technically practical to actively remediate the remaining contaminants at the site. However, the levels of contamination will decrease over time through natural processes.

We have also concluded that the remaining contaminants in the shallow groundwater aquifer are not a risk to the recreational visitor or the workers in the area. Drinking a cup of groundwater from the most contaminated monitoring well on federally owned property, 20 times a year for 30 years would result in increasing the chances of a recreational visitor developing cancer in his/her lifetime by 8 chances in 100,000. This risk will decrease over time as the contaminants naturally attenuate.

Using the same scenario for the monitoring well with the highest risk on MDC property, the risk of cancer is increased by 5 chances in 100,000,000. These risk estimates should be compared to the American Cancer Society's estimate that a person living in the United States has a 1 in 3 chance of developing cancer in their lifetime. Therefore the recreational visitor drinking from the well with the highest risk on MDC property would increase his/her cancer risk from 1 chance in 3 to 1.00000005 chances in 3.

We believe that Monitored Natural Attenuation (MNA) is the best remedy for the groundwater at this site based on the low off-site risk, the technical impracticality of other active remedies and the ability of natural mechanisms to achieve the cleanup standards within a reasonable time period. We also believe that the EPA and MDNR agree with this concept. Details of how this remedy will be implemented remain to be worked out with the affected parties. Comments during the public comment period will also influence the outcome.

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Despite the DOE's position that the site groundwater poses no risk to the recreational user, please understand that our primary goal is to protect human health and the environment. In order for the MNA remedy to be effective, we must preclude possible future residential use of the shallow aquifer or springs on small portions of MDC property. We expect to continue to work together in the spirit of cooperation and concern for the public and the environment in pursuing realty estates that can ensure the remedy is protective. As we recently discussed with your staff, DOE has a wide range of potential actions that allow the federal government to prevent inappropriate access and protect human health and the environment. It is our goal to find the action or actions that satisfy both our organizations.

Sincerely,

Pamela Thompson
Project Manager
Weldon Spring Site
Remedial Action Project

cc: Senator Christopher S. Bond
Senator James Talent
Representative Todd Akin
Representative Kenny Hulshof
David Geiser, DOE HQ
Ray Plieness, DOE-GJO
Dan Wall, EPA
Missouri Conservation Commission
Steve Mahfood, MDNR
Gale Carlson, MHSS
Chris Bigelow, State of Missouri, Washington Office
Weldon Spring Citizens Commission
Kevin Wideman, MoDOT

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