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STATE OF MISSOURI
Mel Carnahan, Governor • Stephen M. Mahfood, Director
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City, MO 65102-0176

June 21, 1999

Mr. Stephen McCracken, Project Manager
United States Department of Energy
Weldon Spring Remedial Action Project
7295 Highway 94 South
Weldon Spring, MO 63304

RE: STEWARDSHIP PLAN FOR THE WELDON SPRING SITE, REVISION A

Dear Mr. McCracken:

On May 12, 1999, we received the referenced draft plan dated April 1999. We appreciate the opportunity to review and comment on possibly one of the most essential documents related to the cleanup of this Department of Energy site. I am pleased to see this initial document as it is the basis for discussion and determination of details appropriate for stewardship activities related to the Weldon Spring site.

Radioactive and some hazardous waste at Weldon Spring will theoretically remain for millions of years. It is therefore essential to ensure that appropriate and necessary measures to protect human health and the environment are implemented today to monitor and manage all waste areas for the future. While a daunting task, this Stewardship Plan is the first step in a comprehensive framework of what is necessary to assess and address future impacts.

It is essential to bring all stakeholders together to share in this discussion of future stewardship. The end state for most of the site was determined in September 1993, when the Record of Decision for the Chemical Plant was signed. As such, many of the questions related to what areas will be cleaned up, where the waste will be placed, and what the area will look like when the cleanup is complete, have all been answered. We would like to continue to work with you and share this plan with all stakeholders so their concerns and suggestions can also be considered. Your letter referenced other documents and meetings to discuss and complete the Stewardship Plan; however, the approach entailing needed steps and timeframes was not clear. It would be helpful to detail this approach so all involved can see a definite path to completion of the plan.

Although the original production work at the Weldon Spring site and remedial activities were conducted by the Department of Energy, its predecessor agencies, and contractors, the ultimate commitment to fully monitor, maintain, and manage impacted

areas falls to the Federal Government. Based on the wastes which either exist entombed at this site or remain as residuals, on- or off-site, the responsibility to properly manage it cannot waiver. As we have heard many times before, "Those who fail to remember the mistakes of the past, are destined to repeat them in the future." As such, several factors concerning future monitoring, maintenance and management of the site and adjacent affected areas are of great concern. Those concerns are: long-term funding commitment, clear assignment of responsibility and authority, enforcement of these activities, institutional controls, and adaptability.

A long-term funding commitment that includes the appropriate oversight is non-negotiable. These funds must be ensured and not subject to future political debate. For other similar commercial hazardous waste disposal sites, financial assurance instruments are established to provide for third party response actions should the primary responsible party fail to adequately address any necessary long-term actions. My understanding is that the Federal Government is exempted from the requirement to secure these financial instruments; however, these types of options need to be raised and fully explored as a means to provide dedicated funds for the perpetual care of the site. We must also consider the possibility of a lack of sufficient funds. What are the anticipated consequences should sufficient funds not be available, and what would happen if the site is not maintained? What can we do now to minimize the impact?

Clear responsibility and authority for perpetual care of the site and impacted areas must be established. The Federal Government must acknowledge that it has the ultimate responsibility for the site, along with clear authority to implement appropriate actions.

The Stewardship Plan adopted must be enforceable should future stewards fail to maintain their commitments or if controls are inadequate. Incorporation of this plan into the upcoming Record of Decision on the Groundwater Operable Unit is one mechanism to provide for this. At this time, the Missouri Department of Natural Resources is reluctant to concur with this Stewardship Plan or the Groundwater Operable Unit Record of Decision until a comprehensive means to insure compliance with both is established.

Institutional controls are referenced in the Stewardship Plan, as in several previous Records of Decision at the Weldon Spring site. To my knowledge, none have been developed or implemented at any portion of this site or associated contaminated areas. It is essential to define the types of controls and timeframes for implementing them. These controls must reference all areas which are not cleaned to background levels and suitable for unrestricted future use.

Adaptability is a key component to address situations which cannot be thoroughly examined at this time. St. Charles County and the surrounding communities will continue to grow. Concerns about perceived or actual threats or negative impacts from the contaminated areas must continue to be evaluated to insure that the necessary

protective measures exist. Stewardship issues are not solely legal, technical or economic; issues related to ethics and values are also considerations. The ability to smoothly implement appropriate and necessary changes is important for all stakeholders and should be addressed.

Enclosed are more detailed comments specific to the Stewardship Plan that should be considered for the next draft. We commend you for your efforts to prepare for the long-term future of the Weldon Spring site, and look forward to continued cooperation between our agencies to finalize this Stewardship Plan. If you have any questions, comments, or require more detail on any of these topics, please do not hesitate to contact Mr. Robert Geller of my staff at (573) 751-3907, or me at (573) 751-3176.

Sincerely,

HAZARDOUS WASTE PROGRAM

Arthur H. Grosser

Cindy Kemper
Director

CK:rge

c: Dan Wall, EPA
Mike Duvall, St. Charles County Division of Environmental Services
Weldon Spring Citizens Commission
Daryl Roberts, Missouri Department of Health
James Fry, Missouri Department of Conservation
Ron Kucera, MDNR/Office of the Director
John Young, MDNR/Division of Environmental Quality
Bob Eck, MDNR/St. Louis Regional Office
Diana Travis, MDNR/Division of Geology and Land Survey
Larry Larson, MDNR/Division of State Parks - Missouri River District
Richard Laux, MDNR/Water Pollution Control Program
Jerry Lane, MDNR/Public Drinking Water Program

STEWARDSHIP PLAN COMMENTS

Abstract – pg ii

1) The Abstract indicates that the Stewardship Plan describes the need for a stewardship program. While this is a key component, little information in the text of the document actually addresses why such a plan is necessary. Expansion of why the plan is necessary should be included.

1. Introduction – pg 4, para 2

2) The plan describes portions of Weldon Spring that require stewardship activities due to the presence of residual contamination. Although the current definition for stewardship specifically references "residual radioactivity and chemically hazardous materials," stewardship activities are required for all radioactive and chemically hazardous materials at and associated with the site. Since waste materials have not been removed from all impacted sites (i.e. the disposal cell) these areas must be included and not lead the reader to think that all waste is removed from the site.

1.1.1 Responsibility

3) All stewards for the site accepting the responsibility must also have the legal authority and associated funding to address issues under their purview. Failure to maintain both will negate any effect of responsibility. Every anticipated steward must clarify the means in which these factors will be addressed throughout the period stewardship is anticipated.

1.1.2 Long Term Effectiveness

4) It is unclear what timeframes are being referenced when the plan indicates that it "provides for operation and maintenance of the disposal cell as well as monitoring and maintenance for both the Chemical Plant and Quarry Groundwater Operable units until protective levels.....are met." The plan continues by indicating that the program employs engineered systems and controls (both physical and institutional), long-term monitoring, and development of contingency plans to address possible adverse events. The approach as described can be ideal if the supporting plans and implementation occur.

1.1.3 Adaptability

5) This concept is key to implementation of a successful stewardship approach and one that can achieve the goals and objectives for all stewards.

Figure 1-1

6) This simplistic diagram regarding documentation provides only two methods of recommendations for modifications to stewardship activities. Many other means of providing input could and should be available; in addition, the process must continue to address how recommendations for modification are evaluated, decisions made and ultimately implemented along with an ongoing reevaluation.

2.1. Authority and Funding

7) Authority and funding are the quintessential elements of any stewardship program. While the authority and funding originate in the U.S. Congress, the ultimate responsibility and liability remain with the Federal Government regardless of delegation of authority and funding. Because the long-term implications and commitments necessary to fulfill a true stewardship program may not be fully known, the Department of Energy should work with the U.S. Congress to implement legislation or with the President to establish an executive order which facilitates such long-term commitments of authority and funding. It may be unwise to continue to subject such critical long-term commitments to the annual appropriation process.

8) Similar assessments by all proposed stewards should be evaluated for authority and funding to address any associated responsibility or function. Principle, Implementation, and Oversight Stewards must be able to implement the actions outlined in the Stewardship Plan once adopted as an independent contract or commitment, not merely existing guidance, orders, or regulations.

Section 2.4 Institutional or Physical Controls

9) Institutional controls are being developed for the Quarry in the Remedial Design/Remedial Action Workplan. However, many gaps are present.

Section 2.5.2 Maintenance

10) A sentence should be added explaining how the lifetime of the stewardship program compares to the length of time contamination will be present at levels that do not allow for unrestricted use.

Section 3.1 Southeast Drainage

11) The easement that the Department of Energy (DOE) will maintain with the Missouri Department of Conservation allows for legal access to the springs and monitoring well in the drainage basin. This easement does not provide the necessary institutional controls that will limit the area to a recreational use. One only has to look to the University of Missouri Research Park to realize that land use can change quickly. A proprietary control such as a deed restriction is needed to guarantee continued use of this land as recreational.

12) Physical controls such as locking monitoring wells would also be applicable for any monitoring wells located in the Southeast Drainage.

Section 3.2 Weldon Spring Quarry

13) Residual contamination remains within the quarry area. At this point, the DOE proposes to designate the quarry property as surplus without stewardship of the property. Due to the levels of contamination exceeding background being left in place and the area not suitable for unrestricted future use, institutional controls are necessary. A deed restriction or other control must be in place if the property is deemed surplus to restrict future property owners from exposure to the residual contamination.

14) The surface water and sediments from the upper and lower reaches of the Femme Osage Slough, the Little Femme Osage Creek, and downstream portions of Femme Osage Creek have been released using a recreational scenario for risk calculations and cleanup criteria. The need for controls for this property to protect future property owners against exposure to residual contamination is evident. This Plan should address this concern.

Section 3.3 Quarry Area Groundwater

15) Monitoring wells number 1017 and 1021 are not shown on this figure. These wells are identified as being retained for the long-term monitoring program in the Remedial Design/Remedial Action Work Plan for the Quarry Residuals Operable Unit, Appendix B (April 1999). Please explain this discrepancy. The number and location of long-term monitoring wells for the quarry area will be finalized in the RD/RA Work Plan for the Quarry Residuals Operable Unit.

16) This Stewardship Plan does not summarize the agreements, responsible parties, and actions that will be implemented in the long-term as referenced in the RD/RA Workplan for the Quarry Residuals Operable Unit.

Section 3.4 Chemical Plant

17) Cleanup documents indicate that 155 acres will be released; however, recent information from the DOE indicates that this property is to be retained. If any portion of the property which contains residual contamination is to be released as surplus, the appropriate institutional controls must be established.

18) Monitoring wells are included in the post-closure configuration as shown in Figure 3-2. It is understood that the location and number of long-term monitoring wells will be finalized within the Remedial Design phase for the Groundwater Operable Unit.

Section 3.4.3 Land

19) Access to long-term monitoring wells will be provided for through access agreements with the Army, Missouri Department of Conservation (MDC), and through ownership of the lands. Do these agreements include access for the oversight stewards, MDNR, St. Charles County, and the U.S. Environmental Protection Agency (EPA)?

20) Access to long-term monitoring wells that are located on non-Federal property (MDC) should be included in this section.

Section 4 SUMMARY/CONCLUSIONS

21) Table 4-1 needs to include the geographical area for Quarry Groundwater (south of slough). An access agreement will be needed to allow continued monitoring of the groundwater south of the slough. Physical controls would include locking monitoring wells, implementation by DOE, oversight by EPA, MDNR, Missouri Department of Health and St. Charles County. Table 4-1 should also be edited to account for changes needed as noted in other comments.