GWOU ADMINISTRATIVE RECORD
SECTION TITLE:
GW-500-501-1.22

Karen/Yvonne/Beck

84224

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

JUL 8 1999

Mr. Steve McCracken
U.S. Department of Energy
Weldon Spring Site Remedial
Action Project Office
7295 Highway 94 South
St. Charles, Missouri 63304

Dear Mr. McCracken:

Re: Draft Final Proposed Plan for Remedial Action for the Groundwater Operable Unit at the Chemical Plant Area of the Weldon Spring Site (June 1999)

We have completed a preliminary review of the referenced plan and generally concur with the preferred remedy as proposed. The preferred approach addresses the overriding risk concern through active measures that can be carried out quickly and cost-effectively and provides for long-term monitoring and analysis to confirm the expected abatement with time of the remaining contaminants. We agree that the preferred remedy is protective, meets or appropriately waives ARARs, and describes the best available approach when evaluated against the remedy selection criteria defined in the NCP. Most of our comments on earlier documents have been adequately addressed, however, we suggest that the following clarifications be made:

1. Section 2.2.2, page 8 & Section 2.3.2, page 12 –The text does not adequately describe the importance of Burgermeister Spring to an understanding of the conceptual site model. Most of the contaminated groundwater in the chemical plant area discharges to the surface at Burgermeister Spring. This is a key factor in understanding fate and transport and evaluating the effectiveness of remedial alternatives.

2. Section 2.3, page 11 –One of the bases for this proposal is that contaminant levels will decrease with time following source removal. Any observed trends based on the data should be briefly explained.

3. Section 4.3, page 18 –This section explains that the remediation goal for groundwater is based on "likely foreseeable future land use" which is considered recreational use. Although the preferred remedy identifies remedial goals consistent with hypothetical groundwater consumption, this section implies that such would not be required. While it is reasonable to identify recreational use as the reasonably anticipated land use in this case, and Superfund guidelines provide that remedial goals for surface exposure pathways may be appropriately based on reasonably anticipated land use, groundwater policy as set forth in § 300.430(f) of the NCP defines a different standard for groundwater remediation. In short, remediation goals for potentially useable groundwater will be drinking water standards. Land use considerations may factor into decisions regarding what constitutes a reasonable restoration time period, but will not affect the threshold determination on the need for remediation.

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4. Section 6.1.3, page 28 –Although subsurface conditions do not appear favorable for biological degradation of TCE, nitroaromatics, and nitrates, the ultimate fate of transported contaminants is to be discharged to the surface water system where conditions are favorable for biological degradation. Recognition of this process is important to an overall understanding of fate and transport.

5. Section 6.2, Comparative Analysis –Again, this section still indicates that all alternatives will comply with ARARs. Based on calculations presented in the supplemental FS that show remediation time-frames as long as several thousand years, one is compelled to conclude that ARARs will not be met. Also, it should be discussed somewhere that it is equally impracticable to achieve remediation goals for contaminants that have no chemical-specific ARAR, e.g. 2,6-DNT.

6. Section 6.2, Comparative Analysis –It would be helpful to include a simplified comparison of estimated cleanup time for pump and treat versus natural attenuation to illustrate the point that it is not feasible to restore groundwater over a reasonable time-frame and that the effectiveness of pump and treat is not substantially different than natural attenuation. Some discussion on the basis of these calculations should be provided to make it clear that the most optimistic performance is simulated.

7. Section 7, Proposed Action –Based on the inability to fully achieve the ARARs for nitrate and 2,4-DNT within a reasonable time-frame, we believe it is appropriate to waive these based on technical impracticability (TI) per § 121(d)(4) of CERCLA. It would be helpful if discussion were added to make clear how TI was demonstrated based on site data consistent with OSWER Directive 9234.2-25, *Guidance for Evaluating the Technical Impracticability of Groundwater Restoration*. In particular, it is important for the reader to understand the results of aquifer testing.

8. Section 7, Proposed Action –It is also important to make the point that if the in-situ treatment of TCE is successful, risk assessment shows that cancer risks from exposure to the remaining groundwater contamination under a hypothetical residential scenario will be within the acceptable risk range provided in the NCP.

Thank you for the opportunity to review this document. We have not had time to do an exhaustive review, but will let you know shortly if additional comments are forthcoming. Please call me at (913) 551-7710 or e-mail me at wall.daniel@epa.gov if you have any questions.

Sincerely,

Daniel R. Wall
Remedial Project Manager
Superfund Division

cc: Larry Erickson, MDNR
Weldon Spring Citizens Commission
Jerry Conley, Missouri Department of Conservation