GWOU ADMINISTRATIVE RECORD
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Electronic copy of letterhead

STATE OF MISSOURI

Bob Holden, Governor • Stephen M. Mahfood, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.state.mo.us

January 20, 2004

The Honorable Spencer Abraham, Secretary
U. S. Department of Energy, S-1
1000 Independence Avenue, SW
Washington, DC 30585

RE: Draft Final Record of Decision (ROD) for Final Remedial Action for the Ground Water Operable Unit at the Chemical Plant Area of the Weldon Spring Site

Dear Secretary Abraham:

I am writing on behalf of the state of Missouri to express our support for the final technical remedy selected for the Weldon Spring site in the "Final Draft" of the Record of Decision (ROD) and seek your assistance to make it work. Regrettably, the state of Missouri cannot yet support the draft ROD because it does not provide adequate long-term protection of human health, public welfare and the environment. It excludes the state of Missouri from the meaningful role that we believe is necessary for ensuring this long-term protection and as provided for by law.

Unlike virtually every other Department of Energy (DOE) site in the United States, there are no provisions in this draft ROD or its' side agreements that empower the people of Missouri to protect themselves against potential neglect by the responsible federal agency. The federal government created the waste it has left in Missouri, and we expect the federal government to meet its obligations to provide perpetual care for the waste and residual contamination, and provide a formal independent oversight role for the State of Missouri.

We are reasonable people and continue to believe that an acceptable ROD can be finalized relatively quickly, and believe that it is in everyone's interest to reach agreement on the site. As the nation's first major industrial nuclear weapons site, where cleanup has been largely completed, the Weldon Spring site offers an opportunity to demonstrate how cleanup premised on a "risk-based end state" can be successful. Alternatively, with no changes to the ROD, Weldon Spring could become an example of the perils of accepting a "risk-based end state"

where there is no meaningful opportunity for independent oversight and long-term care of the site. This legacy would be unfortunate given the terrific work and the constructive spirit of cooperation during more than 15 years of cleanup effort at the Weldon Spring site.

Although the title of the Record of Decision refers to "groundwater," we must make no mistake: this is the final decision document for this site. It must necessarily include all of the remaining issues and decisions regarding the site, particularly the institutional controls and the long-term stewardship plans envisioned for the site. This point is important because the nuclear waste that we have mutually agreed to leave at the site will last indefinitely, and the decisions we make need to be wise. Although we are eager to complete the remedial work at the site and join you and the Environmental Protection Agency (EPA) in counting the site as "done", it would be foolish if we rushed a decision whose consequences will last for infinity.

The decision to leave more than a million cubic meters of nuclear waste permanently in Missouri near a highly populated area has profound implications for our state. We hope that due consideration can be given to allow us time to work together on coordinating this ROD with related issues so that it is successful and sustainable. There are a number of technical comments that remain to be addressed. More importantly, we believe that the future role for the state can and should be resolved simultaneously with this ROD.

The technical remedy proposed for the groundwater contamination at the Weldon Spring site is "monitored natural attenuation", or, basically, "scrutinize the plumes while you let the contamination decay or become diluted." Again, we believe that this can be an appropriate remedy for the site, if special attention is given to the variety of technical circumstances at the site. However, the department cannot support a passive remedy to leave contaminated ground water to dilute itself over time without knowing the details of how we will be able to measure the success of the remedy.

We also believe that the monitored natural attenuation should be technically rigorous and DOE must abide by the technical guidance prescribed by both EPA and DOE. Among others things, using monitored natural attenuation requires an adequate understanding of the horizontal and. vertical extent of all the contamination, which we do not believe yet exists for the TCE. Finally, we do not believe that it is appropriate to have a standard for DOE that is less stringent than what is required for private cleanup sites or other federal facilities.

Although previous Missouri comments have urged that technical details of the remedy be included in the text of the ROD, we are satisfied that these details can be incorporated adequately into Remedial Design documents referenced in the ROD. The details can be negotiated in these documents at a later date with the state at the table as a formal partner. Accordingly, we prefer that the ROD be signed at the same time as an agreement that provides for a meaningful long-

term oversight role for the state (i.e., revised Federal Facilities Agreement). The draft ROD, however, fails to include any mention of such a role for the state. EPA and the department have jointly proposed a draft agreement to DOE. Regrettably, DOE has rejected this constructive attempt at collaboration, although they have publicly committed to such an agreement

If the draft ROD is executed as written by DOE and EPA, excluding the state of Missouri, we request that it include the following "State Acceptance Statement":

"The state of Missouri does not concur on the Record of Decision because the proposed remedy – monitored natural attenuation – will not provide adequate long-term protection of human health, public welfare and the environment under the current circumstances. The state believes that the selected remedy could be effective if adequate technical design is provided. We expect primary documents to include the extent of all contamination, monitoring wells in appropriate locations, contaminant concentrations that indicate increased risk, contingencies that can be readily implemented, and a better developed long-term stewardship plan. The state must also be involved as a full partner with DOE and EPA to provide the necessary independent oversight and monitoring of the site."

I remain optimistic that DOE can and will make the appropriate changes to provide a plan that is protective of human health, public welfare and the environment. Please do not hesitate to call me at (573) 751-4732, or Mimi Garstang, Missouri's state geologist assigned as our formal representative for the site, at (573) 368-2101 if you have any questions. Direct written correspondence to P.O. Box 176, Jefferson City, MO 65102-0176.

Sincerely,

DEPARTMENT OF NATURAL RESOURCES

Original signed by
Stephen Mahfood

Stephen Mahfood
Director

SM:mgd

Enclosure

c: Mr. Joe Ortwerth, St. Charles County Executive
Mr. Robert S. Card, S-3, Undersecretary of Energy
Mr. Jim Gulliford, U.S. Environmental Protection Agency, Region VII
Ms. Jessie Roberson, EM-1, U.S. Department of Energy
Mr. Michael Owen, LM-1, U.S. Department of Energy
Mr. Dave Geiser, LM-40, U.S. Department of Energy
Ms. Cecelia Tapia, U.S. Environmental Protection Agency, Region VII
Mr. Gene Gunn, U.S. Environmental Protection Agency, Region VII
Mr. Mike Duvall, St Charles County
Weldon Spring Citizens Commission
Mr. Ray Plieness, LM-40, U.S. Department of Energy – Grand Junction Office
Ms. Nancy Dickens, Weldon Spring Citizens Commission Contractor
Ms. Pam Thompson, Weldon Spring Remedial Action Project
Mr. Dan Wall, U.S. Environmental Protection Agency, Region VII
Mr. Bill McFarland, U.S. Army Corps of Engineers
Mr. Dave Nelson, U.S. Army Corps of Engineers
Mr. Gale Carlson, Missouri Department of Health and Senior Services
Mr. John Hoskins, Missouri Department of Conservation
Ms. Kathy Love, Missouri Department of Conservation
Mr. John Vogel, Missouri Department of Conservation
Mr. Don Wichern, Missouri Department of Transportation

Missouri Department of Natural Resources
Detailed Comments on the:
Draft Final Record of Decision for the Final Remedial Action for the Groundwater Operable Unit at the Chemical Plant Area of the Weldon Spring Site

January 20, 2004

General Comments:

1. An amended Federal Facility Agreement (FFA) that includes a meaningful role for the department is needed concurrent with the finalization of the Groundwater Record of Decision (ROD) or prior to primary design documents. This concept was agreed to by DOE and EPA. Because the ROD fails to include a role for the state, it is imperative that the amended FFA be finalized concurrently. Without the clarification of the state's role, we remain concerned with the long-term protectiveness of the remedy.

2. Change the site name to the Weldon Spring Nuclear Waste Site. If the site remedial action is to be considered complete with the implementation of this ROD, then the name of the site should be changed from the Weldon Spring Remedial Action Project (WSSRAP) to the Weldon Spring Nuclear Waste Site. The WSSRAP name is no longer appropriate if no more "remedial action" is occurring at the site.

3. The department needs to see all issues resolved regarding the groundwater monitoring for the onsite disposal cell, including the statistical evaluation of monitoring data, adequate number of wells to determine cell performance and sample acquisition questions. The details of long-term cell monitoring must clearly be independent of the monitoring involved in the Monitored Natural Attenuation (MNA) remedy, but must also be coordinated with long-term management of the groundwater contamination left in place. This goal should be defined in the ROD. The details of how both groundwater monitoring programs will function or overlap must be part of the details defined either in the ROD or the RD/RA document.

4. The aquifer in the vicinity of the Weldon Spring Chemical Plant site has been historically used as a drinking water supply for domestic wells. The EPA has determined that the impacted groundwater is a usable drinking water source. Although much of the area is served by public water supplies, there are still private wells in use which need to be clearly identified. A survey locating all the wells being used within a two mile radius of the site should be done so the Missouri Department of Natural Resources, in conjunction with the Department of Health and Senior Services, can sample appropriate wells in the area to ensure their safety. Since four separate contaminant plumes of groundwater will be left at the site, and contamination has already migrated off DOE property, the survey and sampling efforts will provide a necessary level of assurance for the public.

5. DOE's response to our comment regarding continuation of the private well sampling, currently being performed by the Missouri Department of Health and Senior Services is not adequate. The response does not reflect a responsible approach to continuous monitoring of nearby groundwater currently used as a drinking water supply. As discussion progresses on the Long-Term Stewardship plan, this department will continue to support the need for DOE to fund this sampling.

6. Previous comments have requested signage at the Missouri Department of Transportation's culverts under Highway 94 and Route D. These signs would provide information to construction workers of the need to contact DOE for information, due to contamination resulting from the DOE site which exists under the culverts.

7. A study should be conducted to evaluate the extent of bioremediation taking place at and downstream of Burgermeister Spring. This study would assess the need for any enhancement of the current wetland setting. Additionally, implementation of sediment traps in the Southeast Drainage should be made. This would be used to minimize the spread of contamination due to the dynamic nature of sediment migration in the drainage system, contamination will continue to be an issue due to the losing/gaining and erosional/depositional characteristics of this area.

8. The department regrets that the majority of the requested specific details for the Groundwater Operable Unit have not been included in the December 2003 Draft Final Chemical Plant GWOU Record of Decision (ROD). The DOE appears determined to issue this ROD without regard for the state's position. The department continues to express our concern to know these details or at least be assured that we will have an official, legal position to negotiate these details through an amended FFA before we can support a decision for Monitored Natural Attenuation as the remedy for the GWOU at this site.

9. The department worked in good faith to develop a conservative and technically sound groundwater monitoring plan for the contamination left in place at the WSSRAP site. We must continue to insist that the vertical and horizontal extent of all contamination be defined and a safe monitoring plan be put in place to detect any migration of contaminants well before they are a serious risk to the public. The details of a reliable monitoring program and resulting data collected from a sound, long-term monitoring program will be the "key" for both state and federal agencies to prove to themselves and the public that the MNA groundwater remedy is working as expected and that the citizens that live, work and recreate in this area are safe from exposure to contaminated groundwater.

Detailed Comments

1. Section 7.2 Ecological Risk Assessment, page 26. In the Ecological Assessment section, the draft ROD asserts, without technical or scientific support, that the biotic community at Burgermeister Spring is not suffering any adverse effects. This statement should be either (1) omitted entirely, or (2) supported factually with some

scientific and technical information. The vague information provided in the Remedial Investigation needs to be supplemented with supportive information and submitted to the department and the EPA. The data from the survey will assist all agencies in reaching conclusions on the success of the selected remedy (MNA).

2. Section 12.2.1 Institutional Controls, page 38. "On an annual basis, affected landowners would also be contacted..."This is not clear. The passive voice sentence construction does not specify who would perform the task of contacting affected landowners. Although there are a myriad of important details that will need to be addressed later, and can be considered in the RD/RA phase (e.g., what method will be used? Should tenant or temporary land users be contacted or merely the "landowner" who may be absentee? etc.), the basic issue of who will perform the tasks is not one.

3. Section 12.2.1 Institutional Controls, page 38. The EPA and the department should also have access to the groundwater monitoring wells for sampling purposes. This statement should be included in Section 12.2.1 on page 38.

4. Section 12.2.1 Institutional Controls, page 40. The DOE has made significant improvements in its long-term stewardship plans since initial draft documents. Nonetheless, the state of Missouri has evaluated the latest draft and ROD and does not believe they are adequately robust to provide effective long-term protection of human health, public welfare and the environment. Recognized, meaningful and independent oversight remains a missing component in the draft Stewardship Plan.

5. Section 12.2.1 Institutional Controls, page 40. A variety of monitoring technologies should be included in any effective long-term stewardship plan, including biomonitoring. The department understands that the Missouri Department of Conservation (MDC) has been working with the DOE technical staff to develop and implement a regular fish tissue sampling and analysis plan. This type of biomonitoring should be addressed explicitly in the ROD and LTS plan.

6. Section 14, page 45, Delete Section 14. CERCLA Sections 107(f)(1) provides for declaration of the irreversible and irretrievable commitment of a natural resource if an environmental impact statement or other type of comparable environmental analysis has been conducted during as part of the permitting process. The issuance of the ROD does not require a permit nor is this ROD equivalent to an environmental impact statement for purposes of making such a declaration. Furthermore, the DOE states that ARARs will be met in 100 years. Consequently, the resource is not irreversibly and irretrievably lost.