

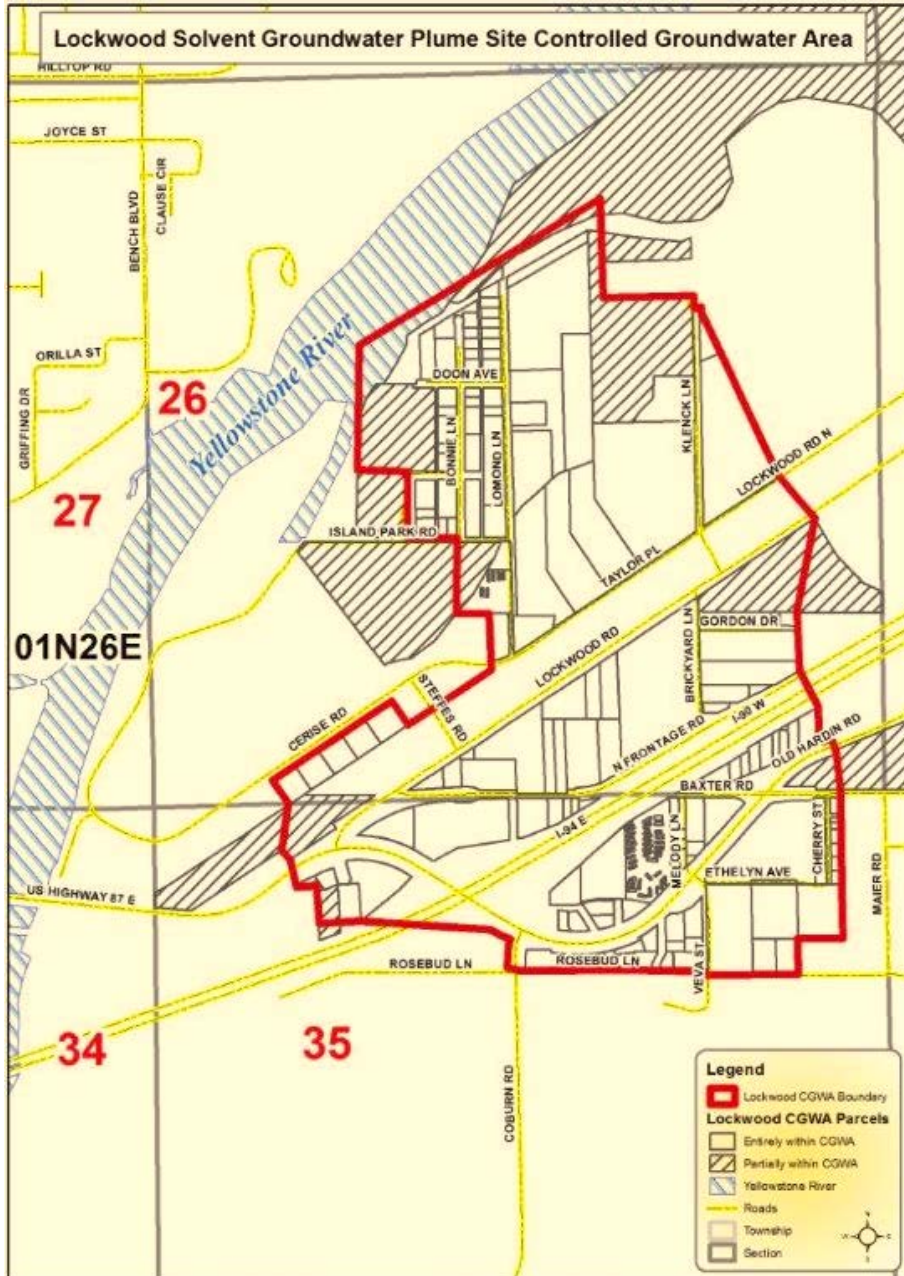
**BEFORE THE DEPARTMENT OF
NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA**

PETITION FOR CONTROLLED GROUNDWATER AREA NO. 43Q 30110019 BY RIVERSTONE HEALTH) DETERMINATION TO PROCEED WITH RULEMAKING ON PETITION FOR CONTROLLED GROUNDWATER AREA

On January 18, 2017, RiverStone Health (Yellowstone County’s public health agency) submitted Petition for Controlled Groundwater Area No. 43Q 30110019 to the Billings Water Resources Office of the Department of Natural Resources and Conservation (Department or DNRC) for the designation of a Controlled Groundwater Area (CGWA). The Petition was later forwarded to the Water Rights Bureau Central Office for processing.

The Petitioner proposes to establish a CGWA near the community of Lockwood, within the Lockwood Solvent Groundwater Plume Site (LSGPS) for water quality concerns. The purpose of the proposed CGWA is to restrict groundwater withdrawals to protect human health. In addition, groundwater withdrawals in the area could contribute to contaminant migration which may expand the contaminated groundwater plumes beyond their current extents.

The Department sent Applicant a deficiency letter on July 13, 2017 requesting additional information. The Applicant responded with information addressing the deficiencies on August 14, 2017. The Petition was determined to be correct and complete on November 24, 2017. On January 22, 2018, the Department informed the petitioner that it would proceed under § 85-2-506(4)(a)(ii), which allows the Department to study the information presented in the petition for a period not to exceed 90 days before denying or proceeding with said Petition.



Department Hydrogeologist Russell Levens was assigned by the Department to review the information provided in the Petition and issued a memorandum of his findings and opinions. Mr. Levens was of the opinion that the information provided by the Petitioner demonstrated that concentrations of chlorinated solvents in the alluvial aquifer exceed human health standards and that new wells in the area could potentially cause spreading of the contaminated groundwater plumes.

FINDINGS

The LSGPS encompasses approximately 580 acres and includes two groundwater plumes, Beall Trailers, Inc. and Soco West, Inc. Groundwater contamination resulted from disposal of solvents used in steam cleaning of tanker truck trailers and chemical repackaging and distribution.

Multiple contaminants of concern (COCs) have been identified for clean-up and include vinyl chloride, tetrachloroethene, trichloroethene, and cis- 1,2-dichloroethene. The contamination forms two plumes: one extending west from the Beall site with another extending north-northwest from the Beall site that combines with contamination from the Soco site. One plume follows the prevailing groundwater flow direction in the area while the other plume follows historical groundwater flow caused by a municipal well operated by the Lockwood Water and Sewer District. Pumping and use of the Lockwood Water and Sewer District well has ceased, however, some groundwater flow continues toward the inoperable well. (Petition (EPA/DEQ, 2005 and EPA, 2014))

The proposed CGWA boundary includes approximately 336 acres within the 580 acre LSGPS site. The boundary was delineated based on the current extent of contamination that exceeds federal maximum contaminant levels (MCLs) as well as Montana DEQ-7 human health standards, groundwater flow patterns, current stability of plumes, and potential for contaminant spreading in response to new groundwater withdrawals. The vertical boundary includes the alluvial and bedrock aquifers. Past testing has shown two occurrences of MCL exceedance in the bedrock aquifer. While the lower permeability of the bedrock aquifer likely impedes downward contaminant migration, cause for concern does exist. No well development will be allowed within the bedrock aquifer due to the potential to move contaminants into the presently uncontaminated aquifer through improperly completed wells or the possibility of created a downward gradient for groundwater flow induced by pumping deep wells. The proposed boundary also includes well setback buffers to ensure that wells that could modify plume behavior in the future will not be allowed. Buffer zones vary from 150 feet to 650 feet based upon the type of well and distance to the Yellowstone River. (Petition, (TtEMI, 2003 and EPA, 2014a))

Water sampling has occurred in the area since 2002. DEQ Final Remedial Investigation Report, 2003 (Petition), establishes that chlorinated solvent concentrations in the area exceed public health standards identified by MT DEQ. In addition, the areas surrounding the Beall and Soco sites continue to show soil contamination which will leach into the immediate groundwater until remediation is completed. Based upon annual and semi-annual monitoring since 2002, it appears that both plumes are largely stable.

Based upon groundwater sampling data presented in the petition, the Department finds that a preponderance of the evidence establishes that groundwater within the proposed CGWA is not suited for beneficial use and public health is potentially at risk from pumping water within the proposed CGWA. § 85-2-506(5)(e) and (f), MCA.

The Department determines that it will proceed with the Petition for Controlled Groundwater Area and initiate rule making proceeds for the proposed CGWA site.

RULEMAKING TIMELINE

The Department will provide the petitioners with a draft copy of the Administrative Rule with this determination to proceed. The Petitioner has until May 4, 2018 to provide any comments. The Department will then finalize the rules and proceed with formal rulemaking proceedings in accordance with Title 2, Chapter 4, part 3, MCA. Any comments provided on the draft rule does not preclude the petitioner from submitting comments during the comment period provided for in the formal proceedings.

DATED this 19th day of April, 2018.

/Original signed by Mark Elison/
Mark Elison, Regional Manager
Billings Regional Office
Department of Natural Resources and Conservation