

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

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IN THE MATTER OF THE BNSF SOMERS SITE)	ORDER DESIGNATING
PETITION NO. 76LJ-30005258 FOR)	CONTROLLED GROUNDWATER
DESIGNATION OF A CONTROLLED GROUNDWATER)	AREA
AREA		

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Pursuant to the Montana Water Use Act, Mont. Code Ann. §§ 85-2-506 and 507, and to the contested case provisions of the Montana Administrative Procedures Act, and after notice required by law, a hearing was held on April 1, 2003, in Kalispell, Montana, to determine if the Department shall order the area in question to be a controlled groundwater area, a temporary controlled groundwater area pending further study, or reject the petition for a controlled groundwater area (CGA). The Department (DNRC) has considered all evidence submitted and all testimony given concerning the Petition.

PARTIES

All individuals who signed the Petition, testified at the hearing, or submitted written comment prior to the record closing are considered Parties. Approximately 15 people attended the hearing. Proponents of the proposed controlled groundwater area designation who testified at the hearing were: Joseph Russell, Flathead County Health Department; Jim Harris, US Environmental Protection Agency (EPA); Leilani Carlson, RETEC, technical consultant for the petitioner; Lisa DeWitt, Montana Department of Environmental Quality; David M. Smith, [Burlington Northern Santa Fe Railway Company (BNSF)]; and Francis Van Rinsum, representing himself as a property owner in the area and associated with the Somers Water District. No opponents testified at the hearing. No individuals submitted written comments regarding the proposed controlled groundwater designation prior to the hearing.

EXHIBITS

Written information received at the hearing and the allowed post hearing responses were assigned a sequential exhibit number by the Hearing Examiner. There were three (3) such documents. Exhibit PC1 is a copy of the Power Point slides (13 pages) presented by Jim Harris, USEPA, and Leilani Carlson (11 pages) in support of the petition. Exhibit PC2 is a map titled Sitewide TPAH, Phenol, TSS, and Zinc Concentrations, September 2000, BNSF Somers, MT, brought to the hearing by the Petitioner. This same map was submitted with the petition (Figure 5). Exhibit PC3 is a memo dated April 2, 2003 from Bill Uthman, DNRC hydrogeologist, containing his written evaluation of the evidence presented at the hearing.

Petition documents and DNRC processing documents (e.g., Environmental Assessment [EA]) are already a part of the record and are not labeled as exhibits. Based upon the record for this matter, the Hearing Examiner makes the following:

FINDINGS OF FACT

1. A Petition for Controlled Groundwater Area (Petition) was filed with the Department on June 28, 2002. The Petition was submitted by Flathead City-County Health Department and signed by the Health Officer, Mr. Joe Russell.
2. A revised map titled "Figure 5 - Proposed Boundary Area" dated 11/15/02 was submitted by the petitioner and received by DNRC on 11/18/02. This map replaced Figure 5 submitted with the original petition.
3. The Petition alleges: a) excessive groundwater withdrawals will cause contaminant migration, and b) that water quality within the groundwater area is not suited for a specific use defined by Mont. Code Ann. § 85-2-102(2)(a), specifically that exceedance of drinking water standards for polycyclic aromatic hydrocarbon (PAH) compounds and zinc render the groundwater unusable as a drinking water source.

4. Polycyclic aromatic hydrocarbon compounds and zinc are the primary contaminants of concern to human health at the BNSF Somers site. (Petition)

5. The proposed controlled groundwater area consists of approximately 67 acres and is described as follows: BNSF property and an area adjacent to the BNSF property west of Somers Road in the NW1/4 Section 25, the SW1/4 of Section 24, and the SE1/4 of Section 23 T27N R21W in Flathead County, Montana. (See attached map.) The proposed controlled groundwater area includes the alluvial aquifer that lies above the Precambrian bedrock aquifer. The alluvial aquifer is comprised of layers and discontinuous lenses of gravel, sand, silt, and clay underlain by the bedrock aquifer. (Petition.)

6. A Notice of Hearing On Petition For Designation of a Controlled Groundwater at the BNSF Somers Site was published in the *Helena Independent Record* and the *Kalispell Daily Interlake* on February 26 and March 5 & 12, 2003, setting forth the Petition, the alleged reasons for the Petition, the legal description of the proposed controlled groundwater area, and the time, place, and purpose of the hearing. Additionally, the Department served notice by first class mail on approximately 51 individuals and public agencies that the Department determined might be interested in or affected by the proposed controlled groundwater area. The notice also stated that any interested person could appear, either in person or by attorney, file written objections to the granting of the proposal, and be fully heard. (Department file.)

7. The Petition proposes that the Department: (1) close the alluvial aquifer within the proposed controlled groundwater area to further appropriation of groundwater until groundwater is restored to appropriate standards; and (2) allow monitoring wells and wells required for remedial action as directed and approved by EPA.

8. The petitioner provided sufficient data showing that water quality standards for zinc and compounds found in PAH have been exceeded in samples taken from the alluvial aquifer. (Petition)

9. The proposed controlled groundwater boundary was established by conducting a capture zone analysis using site-specific aquifer parameters and groundwater flow modeling. The model was used to predict whether pumping would cause migration from the impacted area to the property boundary. The boundary was increased to include the residences west of the Somers Road due to the estimation of the extent of the dissolved contaminant plume. (Petition)

10. The bedrock aquifer is not included in the controlled groundwater area because modeling showed that it would take high volume (500 gallons per minute) and long duration (ten years) of continuous pumping in order to draw a water particle from the alluvial aquifer to the bedrock aquifer. The transport time for the PAH contaminant would be much longer than for a groundwater particle. Due to the high pumping rate and long duration, this groundwater use scenario is impractical and, along with the transport limitation of PAH, provides sufficient reasons to not include the bedrock aquifer in the petition. (Petition)

11. Francis Van Rinsum testified that he was concerned about the proximity of the Somers municipal well to the contaminated site. He did not present any factual information regarding the petition. Mr. Uthman addressed this concern in his memo of April 2, 2003 where he found the likelihood that contaminants would enter the municipal well to be very low because: the municipal well is drilled into the bedrock aquifer; is upgradient of the contaminated alluvial aquifer; and is pumped at rates lower than the test rate that showed theoretical contamination. In addition, the municipal well is tested twice per year for contaminants associated with the Somers site. Based on these facts the proximity of the municipal well to the contaminated site is not problematic.

12. Based on the information in the Petition and evidence presented at the hearing, the Department finds the water in the underlying contaminant plume in the alluvial aquifer is not suitable as a domestic water source and finds groundwater withdrawals from the

alluvial aquifer within the proposed boundary may cause contaminant migration. The alluvial aquifer includes all sediments overlaying the contact with the Precambrian bedrock that underlies the area. (Uthman memo 10/01/02 & 4/2/03)

13. Based on the information in the Petition and evidence presented at the hearing, the Department finds the evidence supports a closure of the alluvial aquifer within the proposed controlled groundwater area to further appropriation of groundwater until groundwater is restored to appropriate standards; and (2) supports allowing monitoring wells and wells required for remedial action as directed and approved by EPA.

Based upon the foregoing Findings of Fact, the Hearing Examiner makes the following:

CONCLUSIONS OF LAW

1. The Department has jurisdiction over the parties and over the subject matter herein. Mont. Code Ann. §§ 85-2-506 and 507.

2. The Department gave proper notice of the hearing and substantive procedural requirements of law or rule have been fulfilled. See Findings of Fact 1, 2, & 6.

3. There is sufficient evidence to designate a controlled groundwater area which includes the alluvial aquifer underlying approximately 67 acres described as follows: BNSF property and an area adjacent to the BNSF property west of Somers Road in the NW1/4 Section 25, the SW1/4 of Section 24, and the SE1/4 of Section 23 T27N R21W in Flathead County, Montana, as shown on the attached map. See Findings of Fact 1,2,3,4,7,8, & 9.

4. There is sufficient evidence to support a closure of the alluvial

aquifer within the proposed controlled groundwater area to further appropriation of groundwater until groundwater is restored to appropriate standards; and to support allowing monitoring wells and wells required for remedial action as directed and approved by EPA.

Based upon the foregoing Findings of Fact and Conclusions of Law, the Hearing Examiner makes the following:

ORDER

1. A controlled groundwater area is designated for the BNSF Somers Site generally described as an area of approximately 67 acres within NW1/4 Section 25, the SW1/4 of Section 24, and the SE1/4 of Section 23 T27N R21W in Flathead County, Montana, the exact boundaries of which are as shown on the attached map.
2. Wells in the alluvial aquifer within the controlled groundwater area boundary are prohibited, with the exception of monitoring wells and wells required for remedial action, which are allowed only as directed and approved by US Environmental Protection Agency. Wells in the bedrock aquifer are allowed. The alluvial aquifer includes all sediments overlaying the contact with the Precambrian bedrock that underlies the area.
3. All new monitoring wells and wells required for remedial action within the controlled groundwater area must be installed in accordance with the appropriate well construction standards as described in Administrative Rules of Montana Title 36 Chapter 21.
4. When groundwater within the controlled area has been restored to acceptable conditions procedures may be initiated to revoke or modify the controlled groundwater designation.

APPEALS

The Department's Order may be appealed in accordance with the Montana Administrative Procedures Act by filing a petition in the appropriate court within 30 days after service of the Order. If a petition for judicial review is filed, the Department will transmit a copy of the tape of the oral proceedings to the district court along with documentary evidence in the file. If a party to the proceeding elects to have a written transcript prepared, that party may purchase the tapes and have a transcript prepared.

Dated this ____ day of _____, 2003.

Arthur (Bud) Clinch, Director
Department of Natural Resources
& Conservation
P.O. Box 201601
Helena, MT 59620-1601

William J. Schultz
Hearing Examiner
Water Resources Division
Department of Natural
Resources & Conservation
P.O. Box 5004
Missoula, MT 59802