

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8, MONTANA OFFICE FEDERAL BUILDING, 10 W. 15th STREET, SUITE 3200 HELENA, MONTANA 59626



Ref: 8MO

October 1, 2010

Mr. Dave Smith Manager Environmental Remediation Burlington Northern Santa Fe (BNSF) Railway Company 825 Great Northern Boulevard, Suite 105 Helena, MT 59601-3340

> Re: Addendum to Final Work Plan for Additional Data Collection

Dear Dave:

EPA and DEQ have discussed the possibility that a sufficient volume of water may not be available to collect depth discreet groundwater samples as per Section 2.0 the Final Work Plan for Additional Data Collection (the Work Plan). The Work Plan also contains no contingency for what to do should insufficient volume be available for depth discrete samples

This letter serves as the Contingency Plan for what to do if an insufficient volume of water is available to take depth discrete samples and also serves as an addendum to the Work Plan. The Contingency Plan is summarized as follows:

The Agencies propose that the boring for replacement monitoring well S-6R be installed first to determine the feasibility of depth discreet groundwater sampling at the Site since Section 2.4 of the Work Plan specifies that depth discrete groundwater samples be taken if impacted intervals are observed below the water table. If it becomes apparent that depth discreet groundwater sampling is not feasible, the Agencies recommend the installation of two monitoring well clusters near proposed location S-10-1A, and in the vicinity of proposed boring location IB-3 or A-GP-1 at the boundary of the Controlled Groundwater Area (CGA) boundary as identified on Figure 1 of the Work Plan. The Agencies are willing to consider alternate monitoring well locations. However, alternate locations must consider groundwater flow

direction, impacts observed during other site assessments, the CGA boundary, and the need for proper coverage of impacted groundwater beneath residences.

The Contingency Plan is detailed below:

- Borings would be advanced to a minimum depth of 65 to 70 feet below ground surface (ft bgs) or until evidence of contamination is no longer observed whichever is greater.
- Screened depths would be determined based on interval of interest (first encountered groundwater to ~70 feet below ground surface), observed impacts, and observed geology.
- Three monitoring wells would be installed at each location: a shallow well screened across the water table, a deep well screened at the bottom of the boring, and a intermediate depth well installed midway between the shallow and the deep wells.
- Screen lengths would be 10' with the possible exception of the shallow well, which may require a 15' screen to properly intercept a seasonally fluctuating water table.
- Monitoring wells would be designed to intercept zones of higher conductivity (if present), and screened depths may vary between the two monitoring well locations in order to intercept high conductivity zones.
- If impacts are not observed in the boring and the lithology appears to be a low conductivity silt or clay, then it may be acceptable to install a shallow well and one deeper well.
- All wells will be completed and developed and groundwater samples will be collected from the screened interval following well development. The depth to water and field parameters will be measured and recorded prior to sample collection (POP 110, POP 221, POP 230, and POP 231).

The Agencies recommend that the AECOM direct its well driller to come prepared to install additional wells (beyond other planned replacement wells specified in the Work Plan) should depth discrete sampling not be feasible. However, alternate locations must consider groundwater flow direction, impacts observed during other site assessments, the CGA boundary, and the need for proper coverage of impacted groundwater.

If you have any questions or concerns about this contingency plan, please call either of us at the following numbers: Lisa DeWitt at (406) 841-5037 or Roger Hoogerheide at (406) 457-5031.

Sincerely,

Lisa DeWitt

DEQ Project Officer

Roger Hoogerheide

USEPA Project Manager

cc:

Shelly Young, AECOM Ann Colpitts, AECOM

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