ATTACHMENT 2

Montana Department of Environmental Quality
Requirements of the Short-term Narrative Water Quality Standard for
Turbidity (318 Authorization) Related to Construction Activity in
State Waters Pursuant to 75-5-318, Montana Code Annotated

VALID (date) through (date).

Dear (applicant name):

The Montana Department of Environmental Quality (DEQ) Water Protection Bureau has completed our review of your project for activity on water bodies that would be crossed by the pipeline alignment shown on Figure I-2.6-1 of Appendix I in the draft Environmental Impact Statement. This activity herewith is qualified for a temporary surface water quality turbidity standard if it is carried out in accordance with the following conditions:

Project General Conditions:

(1) Construction activities in or near the watercourse are to be limited to the minimum area necessary, and conducted so as to minimize increases in suspended solids and turbidity which may degrade water quality and damage aquatic life outside the immediate area of operation,

(2) The use of machinery in the watercourse shall be avoided unless absolutely necessary. To prevent leaks of petroleum products into waterways, no defective equipment shall be operated in the watercourse or adjacent areas capable of contributing surface flow to the watercourse,

(3) Precautions shall be taken to prevent spillage of any petroleum products, chemicals or other deleterious material in or near the watercourse, and no equipment shall be fueled or serviced in adjacent areas capable of contributing surface flow to the watercourse,

(4) All disturbed areas on the streambank and adjacent areas created by the construction activity shall be protected with temporary erosion control during construction activities. These areas shall be reclaimed with appropriate erosion control measures and revegetated to provide long-term erosion control,

(5) Any excess material generated from this project must be disposed of above the ordinary high water mark, not classified as a wetland, and in a position not to cause pollution to State waters,

(6) Clearing of vegetation will be limited to that which is absolutely necessary for construction of the project,

(7) The use of asphalt or petroleum-based products as riprap is strictly prohibited. Its use as fill material is also prohibited if it is placed in a location where it is likely to cause pollution of State waters,

(8) This authorization does not authorize a point source surface water discharge. A MPDES permit is required for said discharge,

(9) Precautions shall be taken to prevent spillage of any petroleum products, chemicals or other deleterious material in or near the watercourse, and no equipment shall be fueled or serviced in adjacent areas capable of contributing surface flow to the watercourse. A spill containment kit must be available at the work site.

Project Specific Conditions:

(1) For each component of the facility crossing a stream (pipeline, valve, pump station, road crossing, and associated power line), a Gantt or PERT chart (or similar project scheduling diagram), and dates for:

a. the completion of all required surveys and reports;
b. the start of construction; and
c. the start and completion of initial reclamation and revegetation.

Keystone will notify DEQ any changes in this schedule.

(2) Flow in a stream course may not be permanently diverted. If temporary diversion is necessary, flow must be restored before a major runoff season or the next spawning season, as determined by the state inspector(s) in consultation with the managing agencies.

(3) Any snow removal shall be done in a manner to preserve and protect road signs and culverts, to ensure safe and efficient transportation, and to prevent excessive erosion to roads, streams, and adjacent land.

(4) The owner of the facility (Owner) shall comply with the erosion control measures described in the Storm Water Pollution Prevention Plan filed with DEQ.

(5) The open-cut, wet method of constructing stream crossings is not allowed if water is present at the time of construction.

(6) At least 60 days prior to the start of construction at a perennial stream crossing or at the crossing of a stream containing a fish species of special concern, the Owner shall submit a site-specific stream crossing plan. At least 30 days prior to constructing the facility or associated facilities at a perennial stream crossing or stream containing a fish species of special concern, the state inspector shall conduct an on-site inspection of the crossing. The Owner shall provide access to the stream crossing. The state inspector shall invite the Owner, a representative of Montana Fish, Wildlife, and Parks, representatives of the local conservation district(s), and the landowner or land management agency to attend this inspection. The purpose of the inspection shall be to determine the final location of the crossing, the crossing method, width and depth of burial to be used and site-specific reclamation measures. The results of these inspections shall be included in Appendix L of the Environmental Specifications required as part of the approval of a Certificate of Compliance for this project. Restrictions on the timing of construction activities at stream crossings will be specified following onsite inspections.

(7) Access roads shall cross drainage bottoms at sharp or nearly right angles and level with the streambed whenever possible. Use of temporary bridges, fords, culverts, or other structures to avoid stream bank damage is required when water is present at the crossing of streams. A one-time crossing of the stream to install temporary crossings may be allowed if no access is readily available. No stream crossings will be allowed without proper water quality permits and written authorization from DEQ.

(8) Streambed materials shall not be removed for use in backfill, embankments, road surfacing, or for other construction purposes except where removed from the trench at a stream crossing.

(9) Trench breakers will be installed where necessary to control the flow of ground water along the trench.

(10) Blasting may be allowed in or near streams if precautions are taken to protect the stream from debris and entry of nitrates or other contaminants into the stream, after applicable permits and authorizations are obtained. The Owner shall obtain the written approval of the state inspector prior to conducting any blasting near streams.

(11) Culverts, arch bridges, or other stream crossing structures shall be installed at all permanent crossings of flowing or dry watercourses where fill is likely to wash out during the life of an access road. On access road(s) all temporary culverts shall be sized to pass 2-year flood requirements and shall be removed after reclamation. The state inspector may approve exceptions. Permanent culverts shall be sized to pass the 100-year flood requirements. Culvert size shall be determined by standard procedures which take into account the variations in vegetation and climatic zones in Montana, the amount of fill, and the drainage area above the crossing. All culverts shall be installed at the time of access road construction.

(12) No perennial watercourses shall be permanently blocked or diverted.

(13) If trench dewatering is necessary, water will be discharged to the ground where adequate vegetative cover exists to prevent channeling and sediment transport, or into temporary dewatering structures constructed of silt fence and/or straw bales. No discharges to surface waters are allowed without a valid discharge permit from DEQ.

(14) Earth next to the pipeline or access road(s) that cross streams shall be replaced at slopes less than the normal angle of repose for the soil type involved.

(15) No construction shall begin at each crossing of perennial streams and streams containing fish species of special concern until site-specific detailed Construction Drawings of stream crossings are submitted to DEQ and approved by DEQ prior to the start of construction.

(16) At stream crossings the Owner shall calculate the depth of scour based on a 100-year flood event and the size of sediments and geologic materials found at the crossing. The Owner shall bury the pipeline below this calculated depth to ensure that floods and lateral channel movement do not expose the pipeline over its lifetime. The scour depth calculation method shall be approved in advance by DEQ. The burial depth shall be extended laterally as approved by DEQ after field inspection of the crossing site.

Although not a condition of this authorization, if possible, please send a digital photo or two of the pre or post project site conditions to jeryan@mt.gov.

This authorization is only valid for the period noted above. No authorization is valid for more than a one-year period of time.

Any violations of the conditions of this authorization may be subject to an enforcement action pursuant to the applicable provisions of the Montana Water Quality Act. This authorization is granted pursuant to 75-5-318, MCA, and only applies to the activity described by your application. Any modification of the activity described in your application which may result in additional turbidity in the stream must receive prior approval from the Department. You may contact me at (406) 444-4626.

Sincerely,

Jeff Ryan

Water Quality Specialist
Water Protection Bureau
e-mail jeryan@mt.gov