

April 15, 1981

Mr. Don C. Ellis
Project Manager
Williams Brothers Engineering Company
6600 S. Yale Avenue
Tulsa, OK 74177

Dear Mr. Ellis:

Your letters dated December 17, 1980, and January 16, 1981, requested a finding under 49 CFR 195.260(e) that valves are not justified at certain water crossings along the Kuperuk Pipeline.

You stated that:

1. Only one of the river crossings is greater than 100 feet wide (at the Kuperuk River) and block valves have been included in the design at this location. The other stream crossings where streams normally carry small volumes are less than 100 feet wide 98 percent of the time, and have not had block valves included in the design. The streams handle "breakup" flow the other 2 percent of the time, and the stream boundaries become undefinable during this period.
2. In addition to the block valves at the Kuperuk River, valves have been installed at the beginning and end of the system some 25 miles apart which, together with the block valves at the Kuperuk River, provide a maximum distance between valves of 16 miles.
3. Block valves placed at minor stream crossings would not be accessible during periods of "breakup" flow, and, therefore, would not be an effective means to reduce spillage if a leak occurred in a stream crossing.
4. Special consideration has been given to the design of the vertical support members (VSM) in the areas of stream crossings. The VSM size is increased from its cross-country 10-inch diameter to 24-inch diameter near streams as an extra factor of safety against possible support failure in stream crossings.
5. None of the minor streams are used by vessels which could interfere with the pipeline.
6. No community takes its water supply from the minor streams.

7. The pipeline operator will have an oil spill contingency plan to minimize the spillage if a leak occurs in the stream.

In view of the above information, the Materials Transportation Bureau finds that valves are not justified on the minor stream crossings (other than the Kugaruk River) on the Kugaruk Pipeline.

Sincerely,

Melvin A. Judah
Acting Associate Director for
Pipeline Safety Regulation
Materials Transportation Bureau