

SECTION 2.7 CHARACTERISTICS OF AQUATIC DISCHARGE SYSTEMS (WAC 463-42-185)

The proposed pipeline system will include a storage and truck-loading terminal, a delivery facility, and up to six pump stations. Olympic Pipe Line (OPL) proposes no discharge of wastewater into aquatic systems during operation of the pipeline.

2.7.1 WASTEWATER AND STORM WATER

The pump stations will not be occupied, but only periodically (a maximum of once per day) visited by OPL maintenance personnel. The pump stations will have an onsite sanitary facility and an emergency shower.

The Kittitas Terminal, located near the town of Kittitas, will provide in-transit storage for the pipeline and inventory of product to support transport truck loading operations. Stormwater from the Kittitas Terminal buildings will be collected and stored in on-site detention ponds. See Section 2.10 for a discussion of stormwater runoff and control.

Because of the site's location, there are two ways to meet the operational sewer needs of the Kittitas Terminal:

- (1) A septic system can be installed; or
- (2) A lift station and a sewer line connecting the Terminal to the City's system can be installed.

The City has verbally indicated a willingness to provide water and sewer service to the Terminal. A City study has shown that the City has adequate capacity to provide both services so it is unlikely that a septic system would be installed. (Varella 1996)

The Pasco Delivery Facility will be located adjacent to an existing terminal in Pasco. The station will consist primarily of metering equipment, an office and a restroom. The wastewater and stormwater will be tied into existing systems at the site.

2.7.2 HYDROSTATIC TEST WATER

The water used for hydrostatic testing will be discharged to three locations, as indicated on Table 2.5-1 in Section 2.5 Water Supply. Discharge locations include into the ground at the Stampede Pump Station where it will be infiltrated and evaporated, into the ground on-site at the Kittitas Terminal or into the Cascade Irrigation Canal near the Kittitas Terminal, and indirectly into the Snake River at the Pasco Terminal. The specific discharge location will be determined based on the conditions at the time of the hydrostatic test. Discharge location and strategy will be selected such that adverse environmental impacts will not occur.

If discharge to groundwater is proposed, the water will be discharged into temporary sediment containment basins to allow suspended particles to settle/and or will be filtered with in-line filtration cartridges. If the test water is discharged into an infiltration basin on site, a preliminary investigation will be performed to determine soil suitability and infiltration capacity.

The test water sources all have quality sufficient for discharge to a stream or for irrigation use (Class A or better quality). Although the quality of the discharge is expected to be above aquatic toxicity standards, it is anticipated that prior to discharge the test water will be filtered to remove particulates, oils and greases which may be present in the pipeline. Potential contaminants contributed to the test water from the testing procedure include metal and carbon particulates, and oils and greases that survive on the pipe from the manufacturing process, and particulates which enter the pipe during construction (sediments and particles from welding). The quantity of potential contaminants is expected to be small in comparison with the volume of water used for testing.

Data on hydrostatic test water quality will be collected by grab sample prior to discharge from the pipe. The sample will be sent to an EFSEC-approved laboratory for analysis. The test water will be held in the pipe until the results of the lab analysis are completed (estimated to be 24 hours). It is anticipated that the parameters of interest for a discharge from a new pipe will be total suspended solids, oil and grease, and pH. OPL will meet applicable standards of the drainage basins where discharges will occur. Typical standards for these parameters are as follows:

TSS: 60 mg/l

Oil and grease: 15 mg/l

6.0<pH<9.0

If a need for pH adjustment is anticipated, the water will be treated as it is loaded into the test segment. If filtering is needed to reduce TSS or oil and grease to acceptable levels, it will be done as the water is discharged through the use of a mechanical filter designed to collect solids or to collect oil and grease. In all cases, the water would then flow through straw bales placed on the stream bank or shoreline prior to discharge into the stream or river if a permit were obtained to discharge into a stream or river.

At the point of discharge, the water quality of the test water is expected to be below minimum acute and chronic toxicity levels before mixing with in-situ receiving waters.

The discharge flow rate will be regulated such that water quality and flow concerns are met. Erosion and sedimentation control measures will be incorporated into the water discharge procedures. By minimizing the quantity of water supplied to the pipeline and re-using water from previously tested segments, discharge of the test water will be kept at a minimum.

Discharge rates will also be low enough to insure non-toxicity after mixing according to WAC 173-201A. The rate of discharge is flexible, and can be regulated to meet receiving water needs to prevent adverse physical and/or water quality effects from excessive flow. As an example, anticipated discharge to irrigation canals (or ground discharge) near Kittitas and Stampede Pass are on the order of 69,000 - 128,000 gallons (0.21 - 0.39 ac-ft, see Table 2.5-1 in Section 2.5), which translates to a flow of less than 0.01 cubic meters per second if discharged over a full day, and less than 0.005 cfs if discharged over two days. Discharge flows of this magnitude may be considerably diluted by the flow in the receiving stream. This is particularly true concerning the discharge to the Snake River, estimated to be less than 0.1 cubic meters per second if discharged over an 8 hour period, which is a very small fraction of baseflows in the River, which are on the order of 200 cubic meters per second (a dilution of 2000 times).

The rate of discharge will be controlled to ensure that the hydrostatic test water does not dominate the flow regardless of main stream conditions. Ensuring that the discharge does not alter the physical characteristics of the flow (i.e., temperature, turbidity, oxygen content, etc.) is just as important as avoiding the introduction of toxic materials. The discharge flow will be regulated to ensure that it does not dominate the flow of the receiving water body, even during low flow conditions. If it is necessary to discharge to an intermittent stream bed during a time when the stream bed is dry, site specific impacts will be assessed and discharge conditions will be developed for approval by EFSEC.

Prior to discharge at each proposed location, a temporary NPDES discharge permit or a State Waste Discharge permit will be obtained. It is anticipated that no chronic or acute toxicities from the discharge will occur, nor will the discharge impact the water quality of the receiving water. Thus, a short term modification to WAC 173-201A will not be necessary. The permit application will include the specific location, quantity, quality, rate, timing and receiving water conditions at the time of the discharge, as well as a discharge monitoring and action plan. As a stipulation in the permit, discharge flow rates can be tied to action levels resulting from the water quality monitoring.

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