Appendix Y Jericho Catchment Area

A map showing the drainage basin and other projects in region are shown in the attached figures 1 and 2. As indicated, the Jericho project is the only significant project in the Jericho River catchment. Small temporary camps (i.e. outpost, mineral exploration, etc.) may exist, but are not considered significant enough to affect the outcome of this discussion. The Burnside catchment area is shown on Figure 2 and contains the Lupin Mine and the George Lake exploration camp.

As discussed in SRK Consulting's Technical Memorandum W, the Jericho Project will use approximately 20 to 30 m3/hr (175,000 to 260,000) m3/yr of water for ore processing. Runoff from the site will be collected and stored in the PKCA as required to meet the applicable water quality standards. The site water and load balance (SRK Technical Memorandum W) indicates that annual discharges from the PKCA will be on the order of 490,000 m3/yr during mining operations.

Flows at the outlet of Carat Lake, at the mouth of the Jericho River (upstream of Kathawachaga Lake), and near the mouth of the Burnside River are provided in Table 1. The discharge flows expressed as a percent of the total catchment flows are also provided in Table 1. As indicated, the Jericho project will utilize approximately 1.1% of the total flow of the Jericho River upstream of Kathawachaga Lake, and approximately 0.013% of the total flow in the Burnside River catchment. Therefore, the cumulative effects of this project on the Jericho River and Burnside River watershed are considered insignificant.

Table 1

Location	Catchment Area	Runoff*	Discharge Flow as a percent of total catchment flows
	Km2	1000 m3/yr	%
Discharge from PKCA		490	100%
Outlet of Carat Lake	148	28,120	1.7%
Jericho River upstream of Kathawachaga Lake	227	43,130	1.1%
Burnside River upstream of Bathurst Inlet**	23,700	3,700,000	0.013%

Notes: * Runoff for the project site, Carat Lake and the Jericho River were calculated based on runoff coefficient of 190 mm/yr.

** The Burnside River catchment area represents the catchment at the Water Survey of Canada Station, which is 45 km upstream of Bathurst Inlet. Flows are annual average discharges at this station.



