

# SUN PEAKS WWTP, SUN PEAKS, BC

## CASE STUDY

This advanced wastewater treatment plant serving the modern ski village at Tod Mountain was started up on November 19, 1999. The resort includes a number of large restaurants and hotels, shops, ski facilities and several hundred private dwellings. The plant does not include tertiary treatment and the permitted treatment parameters are 40 mg/l for both BOD<sub>5</sub> and TSS with effluent discharge into rapid infiltration ditches.

Initially, the plant consisted of two bioreactor modules (see picture right). With the rapid growth of the resort, the plant was expanded and additional bioreactor modules were added in 2003, 2005 and 2008.



The plant experiences a wide range of flows and organic loadings throughout the year; low in summer and extremely high during Christmas, President's Day and Easter weeks. Modular design and the inherent ability of the USBF clarifier to accommodate wide range of flows ensure year round efficient treatment and operation.

Min Day Flow:	120 m <sup>3</sup> /d	32,000 GPD
Max. Day Flow:	1,350 m <sup>3</sup> /d	360,000 GPD
Average Winter:	950 m <sup>3</sup> /d	250,000 GPD
Average Summer:	400 m <sup>3</sup> /d	100,000 GPD
Peak Hourly (inst.):	120 m <sup>3</sup> /h	530 gpm

