Executive Summary English

This Sewage Treatment Plant Operations and Maintenance Plan (Plan) has been prepared by Bonito Capital Corporation (BCC), a wholly owned subsidiary of Elgin Mining Inc. (Elgin) for the Ulu Exploration Project (Project) in accordance with its Water Licence 2BM-ULU0914 (Licence). The Project site is located in the Kitikmeot region of Nunavut approximately 12 km north of Hood River and 150 km north of Lupin Mine and has been in a state of care and maintenance since 2006.

Sewage and domestic wastewater from the camp facility is treated using a Rotating Biological Contactor (RBC) process. The treatment system is an aerobic, fixed-film biological treatment process designed to remove both Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) from the wastewater. Treated sewage effluent that meets the discharge criteria set out in the water license is discharged to East Lake via a 550 metre, insulated two-inch pipeline. Design conditions for the sewage treatment unit are based on 40 camp residents. During the camp start-up phase, the final effluent from the sewage treatment plant will be directed to the mine sump containment pond and held there until results from water quality monitoring are acceptable and approval is received from AANDC to discharge to East Lake. The effluent contained in the mine sump containment pond will then be directed to the STP primary clarifier for final treatment process.

Based on the design loadings of the treatment unit it is estimated that approximately 0.02 m₃/day of sludge will accumulate in the RBC treatment unit. This volume of sludge production will require pump out twice per year and will be disposed of on-site in a shallow above-ground sump, covered with rock.

Routine operation and maintenance procedures include visual inspections and RBC effluent quality measurements. Non-routine operation and maintenance procedures will be carried out as needed to deal with sewage sludge, and system shut down and start-up. Treated effluent will be sampled on a monthly basis in accordance with the Licence and detailed records of maintenance activity, sampling and analytical results will be maintained.

This Plan summarizes potential operational problems, causes and corrective actions developed by the RBC manufacturer as well as a list of "Do's" and "Don'ts" to help ensure smooth operation of the unit. In the event of a failure of the system, emergency response procedures are also outlined in this Plan.