YUKON WATER BOARD
AMENDMENT OF LICENCE

LICENSEE: Yukon Zinc Corporation

LICENCE: QZ01-051

AMENDMENT NUMBER: 1

APPLICATION NUMBER: QZ09-086

Pursuant to the *Waters Act*, Water Use Licence QZ01-051, as amended by amendment one, is hereby further amended as follows:

1. Part E, Clause 41 is hereby withdrawn and replaced by:

Part E - Effluent Quality Standards

41. As described in Application QZ09-086, no waste discharge shall exceed the following limits, as evidenced by the laboratory analysis reports:

PARAMETERS	**Maximum Authorized Concentration (Grab Sample)**
Arsenic (total)	0.1 mg/L
Cadmium (total)	0.006 mg/L
Copper (total)	0.05 mg/L
Lead (total)	0.07 mg/L
Nickel (total)	~~0.05 mg/L~~ ***0.5 mg/L***
Ammonia (as total N)	5.0 mg/L
Zinc (total)	0.5 mg/L
Selenium (total)	0.06 mg/L
Total Suspended Solids (TSS)	15.0 mg/L

a) During Phase I, which will be carried out over a maximum period of 6 consecutive days, the Licensee is authorized to:

i) discharge a maximum of 6,000 cubic metres of treated water from the above ground sumps at a rate of 1,700 cubic metres per day; and

ii) pump and treat 4,500 cubic metres of water from the underground workings and temporarily store the treated water in the above ground sumps prior to discharge.

b) During Phase II which shall be for the duration that commences upon the completion of Phase I and continues up to and including October 31, 2009, the Licensee is authorized to discharge treated water at a maximum rate of 200 cubic metres per day.

c) The maximum quantity authorized to be discharged during Phase I and Phase II shall be 31,000 cubic metres of treated water.

d) The Licensee shall submit to the Board by August 14, 2009, longitude and latitude coordinates for the final point of discharge from the above ground sumps as depicted in application QZ09-086.

2. Part G, Clause 50 is hereby withdrawn and replaced as follows:

50. The Licensee shall submit to the Board an updated water balance of the site and an updated Water Management Plan for the management of water including the spring freshet water of 2010 by August 14, 2009 and once annually thereafter. The plan shall include at a minimum, but not necessarily be limited to:

a) consideration of the effluent quality discharge standards set out in water use licence QZ04-065; and

b) the capacity of the tailings facility, that is authorized in water use licence QZ04-065 and its ability to accommodate the flows modeled in the updated plan; and

c) a reassessment of the input values used in the water quality model, including but not limited to:

i) hydrological components including watershed areas, snowpack thickness, temperature, evaporation rates, precipitation, timing of snowmelt, site runoff characteristics; and

ii) hydrogeological components including groundwater seepage rates into and out of reservoirs, groundwater inflow into mine workings; and

d) details that demonstrate that there will be sufficient capacity to manage water within the project area during all stages of operation authorized under QZ01-051 and QZ04-065; and

e) details that demonstrate the adequacy of site water management infrastructure, including reservoir storage capacity, tailings pond characteristics, pumping capacities, water treatment capabilities, through sensitivity analysis, to allow for calibration and refinement as the project evolves; and

f) consider the requirements of clause 53 of the water licence QZ01-051.

3. Clause 44 is hereby withdrawn and replaced as follows:

44. The Licensee shall comply with the Surveillance Network Program attached as Appendix A and Appendix B to this licence.

4. **Appendix B is hereby added as follows:**

Appendix B - Monitoring and Surveillance Program for the Emergency Discharge Event of 2009

B-1. All monitoring requirements included in Appendix B, shall be documented and submitted to the Board in one unbound hardcopy and one electronic copy on the 14th day of each month.

Monitoring Station	Flow Rate	Water Quality[2]	Sediment Sampling[3]	Benthic Sampling[4]
End of Pipe	-P1[1]: Continuous -P2[1]: Continuous	-P1: Daily -P2: Daily	N/A	N/A
W-80	-P1: Pre-discharge -P1: Continuous -P2: Pre-discharge -P2: Continuous	-P1: Daily -P2:Weekly	-Prior to P1 -During P2 -Post P2 completion	-Prior to P1 -Post P2 completion

[1]: P1 is Phase I, and P2 is Phase II, as described in the application QZ09-086

[2]: Water Quality: To include field pH and temperature, lab pH, temperature, conductivity, hardness, total suspended solids, dissolved organic carbon, nutrients, ammonia, major ions including sulphate, total and dissolved metals.

[3]: Sediment Sampling: Triplicate sampling to be analyzed for metal content on the fraction <63µm, total organic carbon, and particle size distribution.

[4]: Benthic Sampling: Collected and analyzed for total metal content using low detection limits. Biological tissue to be collected and sorted from debris to meet minimum sample requirement for lab analysis. Duplicate analysis from the sample shall be provided and reported.

B-2. The Licensee shall collect the following bioassay samples for laboratory analysis. The samples for W-80 shall be retained and shall only undergo laboratory analysis should the water quality results exceed the effluent discharge standards required by this licence.

	Acute Bioassay		Chronic Bioassay
Monitoring Station	96-hr Rainbow Trout LT_{50}	48-hr *Daphnia magna* LT_{50}	7-d *Ceriodaphnia dubia*
End of Pipe	-P1: mid-point of phase -P2: bi-weekly	-P1: mid-point of phase -P2: bi-weekly	-P1: n/a -P2: bi-weekly
W-80	-P1: n/a -P2: bi-weekly	-P1: n/a -P2: bi-weekly	-P1: n/a -P2: bi-weekly

Correction issued this 15th day of July, 2009

Witness

Bruce Willis, Chairperson
YUKON WATER BOARD