

YUKON WATER BOARD

Pursuant to the *Waters Act* and *Waters Regulation*, the Yukon Water Board hereby grants a type B water use licence for a placer mining undertaking to:

Newcan Placers Ltd.
Box 1244
Dawson City, YT Y0B 1G0

LICENCE NUMBER: PM03-321
LICENCE TYPE: B **UNDERTAKING:** PLACER
WATER USE AREA: 2 **STREAM CLASSIFICATION:** IV A
LOCATION: Latitude: 63° 25' N Longitude: 139° 20' W
WATER SOURCE: North Henderson Creek, a tributary of Henderson Creek and Emaline Creek, a tributary of North Henderson Creek

MAXIMUM QUANTITY: 9,820 cubic metres per day

EFFECTIVE DATE: May 1, 2005

EXPIRY DATE: April 30, 2015

This licence shall be subject to the restrictions and conditions contained herein and to the restrictions and conditions contained in the *Waters Act* and *Waters Regulation* made thereunder.

Dated this 31st day
of March, 2005

Approved by:

Vica Hendau
Witness

Sharon L. Cooper
Chairperson
YUKON WATER BOARD

PART A DEFINITIONS

“Act” means the *Waters Act* and any amendments thereto.

“Application” means application for water use licence PM03-321 and placer mining land use approval AP03321, including any subsequent information presented to the Yukon Water Board, up to the date of the Yukon Water Board’s decision.

“Board” means the Yukon Water Board.

“Diversion” means any direct or indirect alteration of a portion of or all of the water flowing in a course, route, bed, bank or boundaries of a river, stream lake or watercourse.

“Inspector” means any person designated as an Inspector under the Act.

“Natural boundary” means the visible high water mark of any lake, river, stream or other body of water where the presence and action of water is so common and so long continued as to mark the soil of the bed of the lake, stream or other body of water a character distinct from the banks thereof, both in respect of vegetation and in respect to the nature of the soil itself. In addition, the best estimates of the edge of dormant or old side channels and marsh areas are considered to be Natural boundaries.

“Regulation” means the *Waters Regulation*.

“Spring freshets” mean the sudden increase in flow carried by a stream as snowmelt occurs at higher elevations in the watershed.

“Watercourse” means any stream, lake, pond, creek, spring, ravine or swamp whether ordinarily containing water or not.

“Work area” means any area disturbed and/or altered by mining activities, excluding any stable Diversion channel.

PART B WATER USE AND WASTE DEPOSIT

1. The Licensee is hereby authorized to:
 - a) obtain water from North Henderson Creek and Emaline Creek at a maximum combined quantity of 9,820 cubic metres per day;
 - b) divert the stream channels of North Henderson Creek and Emaline Creek;
 - c) use this water for a placer mining undertaking on claim (grant) numbers as shown on Appendix A, attached; and
 - d) return a flow of water to North Henderson Creek and Emaline Creek and to deposit a waste into North Henderson Creek and Emaline Creek

as described in the Application and subject to the conditions of this licence. Where there is a discrepancy between the Application and the conditions of this licence, the conditions of this licence shall prevail.

2. The Board has relied on the representation, warranties and undertakings provided by the Licensee in the materials filed with the Application. Such representation, warranties and undertakings are considered, by the Board, to be part of the licence, but shall be subject to, and may be modified by, the conditions of the licence.
3. All work authorized by this licence shall occur on property that the Licensee has the right to enter upon and use for that purpose.
4. Effluent Quality Standard: Any grab sample at the point of discharge from the final settling facility shall not exceed settleable solids of 2.5 millilitres per litre above levels in the stream immediately above the uppermost mine operation.
5. Except as otherwise provided in this licence, the Licensee shall not deposit or permit the deposit of a waste containing:
 - a) anything toxic to fish;
 - b) floating solids;
 - c) visible oil or grease; or
 - d) a total concentration of mercury in excess of 0.005 milligrams per litre

into a receiving stream, or in any place, under conditions where such waste, or any other waste, that results from the deposit of such waste, if resulting waste contains any of the items prohibited by this paragraph, may enter the receiving stream.

6. If, subsequent to the issuing of this licence, the Licensee uses water and/or deposits waste in one or more ways not authorized by this licence, and the combined effect of those uses and/or deposits of wastes, as determined by an Inspector:

- a) has no potential for adverse environmental effects;
- b) does not interfere with existing rights of other water users or waste depositors; and
- c) satisfies the criteria set out in Column 2 of Schedule 6 of the Regulation

no amendment to this licence will be required for that use of water and/or deposit of waste.

7. Fuels, lubricants, cleansers, solvents and similar chemicals or substances shall be used, transported, stored and disposed of in such a way that said substances are not deposited in or allowed to be deposited in waters.

PART C MINING ACTIVITIES

8. Stream channel Diversions may be constructed.
9. The Licensee may construct an intake ditch to an out of stream pump pond/reservoir.
10. The Licensee shall provide barriers consisting of fish guards, screen, coverings or nets on all water intakes as follows:
 - a) Screen and nets shall have a minimum of 3.5 openings per centimetre and openings no greater than 3.2 millimetres along any given side.
 - b) If a punch plate or similar material is used, openings shall be no greater than 3.2 millimetres in length or width.
 - c) There shall be no less than 929 square centimetres of open screen area for every 205 litres per minute being withdrawn.
 - d) The barriers shall be monitored and maintained to ensure they function effectively at all times when water is being withdrawn.
 - e) The barriers shall be designed and installed in such a manner that the screen is submerged and a uniform flow distribution is maintained through the total screen area.
 - f) Water shall not be withdrawn when the barrier is removed for renewal, repair or inspection.
 - g) The Licensee shall cease pumping or decanting and take remedial action if there is alteration to the bed or bank of the water channel.
11. All instream earthworks, Diversions, ditches, spillways and other water related structures built or otherwise constructed for the storage or conveyance of water shall be able to withstand seasonal floods.
12. All storage and settling facilities and associated spillways, drains and water supply ditches located outside the stream channel shall be of adequate capacity and construction.

13. All works associated with the undertaking, including but not limited to, all dams, weirs, spillways, stream crossings, ditches, gates, water intakes, culverts and settling facilities shall be maintained in good repair.
14. A protective berm shall be constructed and maintained along the stream channel Diversions.
15. Settling facilities shall be provided for all mining wastewater.
16. Available overburden shall be stockpiled for future site restoration and such stockpiles shall be located where they will not adversely affect water quality in any Watercourse.

PART D WATERCOURSE CROSSINGS

17. The Licensee may modify the bed and banks of streams to allow for fording of the watercourses. The number of fords shall be limited to those shown in the Application.
18. The Licensee shall adhere to the following conditions regarding fording of creek channels:
 - a) All crossings shall be at right angles to the stream.
 - b) Removal of vegetation adjacent to the crossings shall be minimized.
 - c) Non-erodible materials shall be placed on the bank on both sides of the crossings to stabilize the banks.
 - d) The stream crossing approaches shall be low and stable enough to support the vehicles and equipment.
 - e) The streams shall be crossed on either a firm rock bottom or a coarse gravel bottom.
 - f) Equipment crossing the watercourses shall be mechanically sound and free of leaks.
 - g) The blade or bucket on equipment shall be left in the raised position when crossing the Watercourses.

PART E DIVERSION/CHANNEL CONSTRUCTION AND RESTORATION

The Licensee shall adhere to the following conditions regarding construction of all Diversions, redirection of the Watercourses into the natural channel and restoration:

19. The Diversion channel width on North Henderson Creek shall be no less than 10.0 metres and no less than 4.0 metres on Emaline Creek.
20. The Diversion channel depth on North Henderson Creek shall be no less than 2.0 metres and no less than 1.5 metres on Emaline Creek.
21. The Diversion channel grade on North Henderson Creek shall be between 0.0 % and 2.0 % and on Emaline Creek shall be between 0.0 % and 4.0 %.

22. The bed and the banks of the Diversion channels shall be left in a stable condition.
23. The bed and banks of any tributary (gulch or pup) of North Henderson Creek and Emaline Creek shall be left in a stable condition.
24. Class I armouring shall be used, as directed in Schedule 1, attached.
25. Structures, such as boulder groupings or rock islands, shall be provided and spaced no further than 120 metres apart in the reconstructed channel of North Henderson Creek and no further apart than 48 metres in the reconstructed channel of Emaline Creek.
26. Topsoil and organic overburden or fines from washed tailings shall be spread on the graded areas on both sides of the restored channels.
27. Active re-vegetation measures are required on at least one side of the restored channels.
28. The stream channels shall be left in such a manner so that erosion is controlled and re-vegetation is possible.

PART F SEASONAL CLOSURE

The Licensee shall comply with the following conditions pertaining to seasonal closure:

29. The mine shall be left in a stable condition at the end of each mining season.
30. An Inspector shall be contacted not less than 2 weeks prior to seasonal closure.
31. To prevent flood damage during Spring freshets, the water reservoir intake ditch shall be blocked and the Diversion ditches shall be constructed and maintained to withstand and convey flood flows.
32. Spring freshets shall not be routed through Work Areas. Where Diversions around working areas are built or excavated, they shall be open in preparation for Spring freshets.
33. All mined or otherwise disturbed ground surfaces, including cut banks, fill slopes and tailings piles, shall be stabilized annually to prevent erosion and surface runoff from carrying sediment into adjacent Watercourses.

PART G DECOMMISSIONING

Prior to final decommissioning and/or expiry of this licence, the Licensee shall:

34. Ensure the final Watercourse channel approximates its pre-licence condition in length, width, gradient and stability, except as may otherwise be required in this licence;
35. Ensure that all dams and dikes across Watercourses are removed; and
36. Contact an Inspector not less than 2 weeks prior to final decommissioning.

PART H REPORTS, SAMPLING & ANALYSAIS

37. Where there is a surface discharge from the settling facility, the licensee shall take weekly samples at the point upstream of the water supply intake and at the point of discharge from the final settling facility, and shall analyze these samples, using the Imhoff cone 1-hour test.
38. Where no discharge from the settling facility to a receiving stream occurs, whether by surface discharge or seepage, no sampling is required.
39. On or before the anniversary of the date of the issuance of this licence, and for each year during which this licence is in effect, the Licensee shall submit an annual report to the Board.
40. Annual reports shall include the information required by this licence and by the Regulation, including, but not limited to:
 - a) the quantity of water used under the licence,
 - b) the quantity, concentration and type of any waste deposited under the licence,
 - c) all data collected as a result of any sampling which is required by this licence,
 - d) a description of the reclamation that has taken place, and
 - e) a list of claim (grant) numbers where the reclamation has taken place,during the year reported.

PART I GENERAL CONDITIONS

41. The expiry date of this licence shall be April 30, 2015.
42. Sewage, including all human excreta and wastewater associated with daily camp operations, shall be disposed of in accordance with the *Public Health and Safety Act* of Yukon.
43. The location of subsurface grey water pits and/or pit privies shall be not less than 30 metres from the high water mark of any Watercourse and at least 1.2 metres above bedrock or the water table.
44. If very permeable soils are encountered, the pit privy or grey water pit shall be lined with 0.6 metres of sand or silt.
45. All garbage and refuse shall be kept in a covered container until removed from site or, where appropriate, incinerated and buried under no less than 1 metre of compacted soil in pits not less than 30 metres from the Natural Boundary of any Watercourse.
46. The Licensee shall contact the 24-hour Yukon Spill Report number (867) 667-7244 and implement the Spill Contingency Plan, should a spill or unauthorized discharge occur. A detailed report of any such event, including but not limited to, dates, quantities, parameters,

causes and other relevant details shall be submitted to the Board no later than 10 days after its occurrence.

47. No condition of the water licence limits the application of any federal, territorial, first nation or municipal legislation.
48. In the event that the Licensee fails to comply with any provision or condition of this licence, the Board may, subject to the Act, cancel this licence.
49. Where any direction, notice or order under this licence is required to be in writing, it shall be given:

- a) to the Licensee, if faxed, delivered or mailed by registered mail to the following address:

Newcan Placers Ltd.
Box 1244
Dawson City, YT Y0B 1G0
Fax: (867) 993-2876

and shall be deemed to have been given to the Licensee on the day it was faxed or delivered or 7 days after the day it was mailed, as the case may be; or

- b) to the Board, if delivered, faxed or mailed by registered mail to the following address:

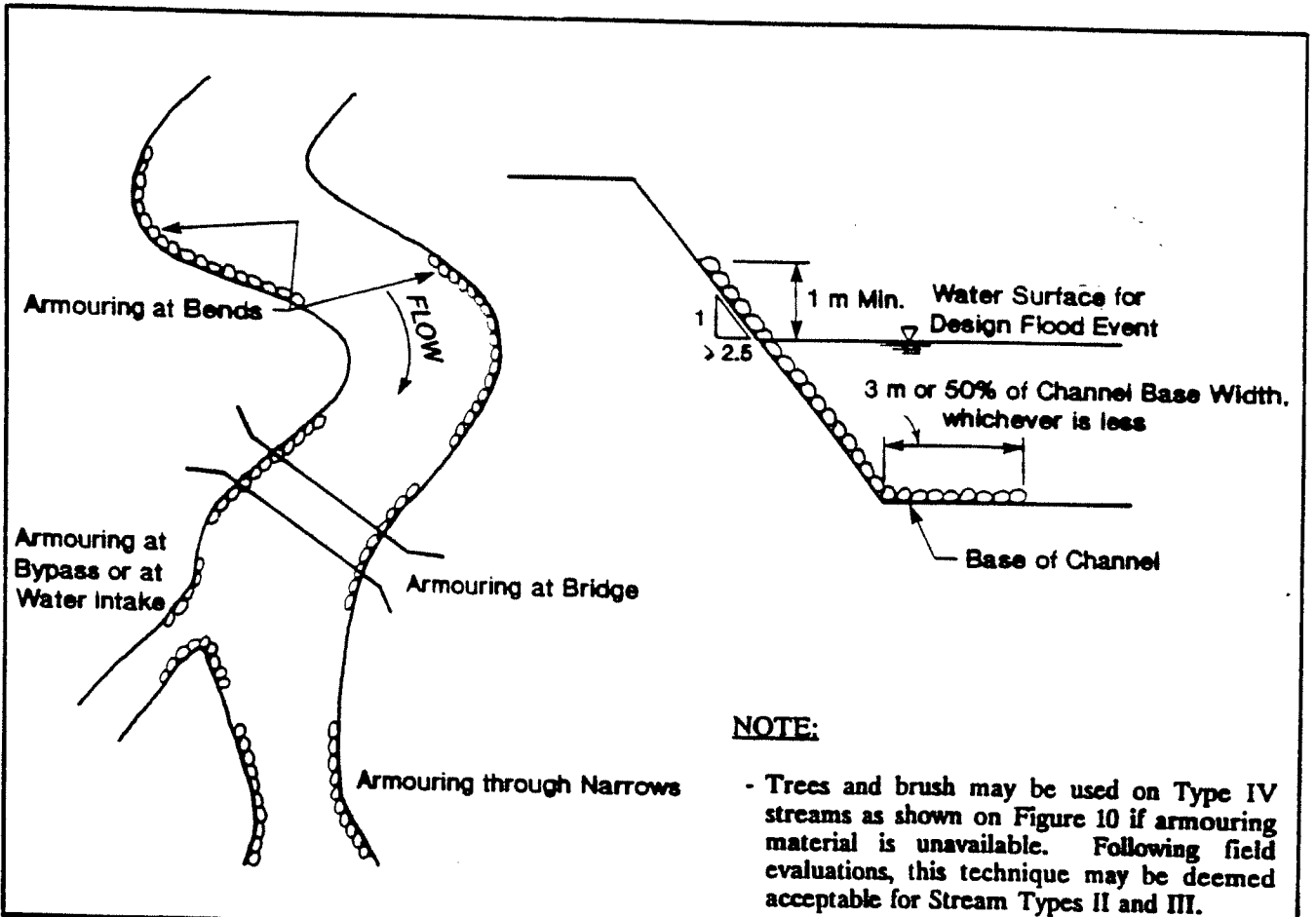
Yukon Water Board
Suite 106, 419 Range Road
Whitehorse, YT Y1A 3V1
Fax: (867) 456-3890

and shall be deemed to have been given to the Board on the day it was delivered or faxed or 7 days after it was mailed, as the case may be.

APPENDIX A

Claim	Claim	Claim	Claim	Claim	Claim	Claim	Claim
P19369	P19383	P10526	P10540	P35611	P35624	P45009	P45022
P19370	P19384	P10527	P10541	P35612	P35625	P45010	P35650
P19371	P19385	P10528	P10542	P35613	P35626	P45011	P35651
P19372	P19386	P10529	P10543	P35614	P35627	P45012	P35652
P19373	P19387	P10530	P10544	P35615	P35628	P45013	P35653
P19374	P19388	P10531	P10545	P35616	P35629	P45014	P35654
P19375	P10518	P10532	P10546	P35617	P45002	P45015	P35655
P19376	P10519	P10533	P10547	P35618	P45003	P45016	P35656
P19377	P10520	P10534	P10548	P35619	P45004	P45017	P35657
P19378	P10521	P10535	P10549	P35620	P45005	P45018	P35658
P19379	P10522	P10536	P10550	P35621	P45006	P45019	P35659
P19380	P10523	P10537	P10551	P35622	P45007	P45020	P35660
P19381	P10524	P10538	P10552	P35623	P45008	P45021	P35661
P19382	P10525	P10539					

SCHEDULE 1



PURPOSE:

- To control bank erosion at bends or curves, at bridge approaches and abutments and through channel narrows.

DESIGN:

- Channel armouring should extend from the base of the channel to at least 1 m above the water surface (depth of flow) for the design flood event.
- Armouring should extend beyond the toe of the channel bank along the base of the channel 3 m or 50% the base width of the channel, whichever is less.
- The bank or channel side slopes should be no steeper than 2.5H:1V where the bank is to be armoured.
- Use the following table to determine what size of armouring material should be used.

SUGGESTED STONE SIZES FOR ARMOURING MATERIAL

	Riprap Class					
	1		2		3	
	mm	inches	mm	inches	mm	inches
Maximum Stone Size	450	18	800	32	1200	47
Average Stone Size	300	12	500	20	800	32
Velocity	< 3 m/s		3 to 4 m/s		4 to 4.7 m/s	

CONSTRUCTION:

- Place material on bank using available equipment.
- Ensure that there is a fairly uniform mix of armour material sizes on bank.

ARMOURING TECHNIQUES

YUKON WATER BOARD
REASONS FOR DECISION
Water Use Application PM03-321, Newcan Placers Ltd.

The Yukon Water Board (the Board) has made licensing decisions with respect to water use application PM03-321, which is an application for a renewal of PM96-079, a type B licence for a placer mining undertaking.

The purpose of the application was to obtain water, divert water and to alter the flow or store water and to obtain a mining land use approval.

Notice of application was provided in accordance with the requirements of the *Waters Act* and the *Placer Mining Land Use Regulation*. In response, the Board received interventions from the following parties:

Fisheries and Oceans Canada (DFO),
Government of Yukon (GY), Mining Land Use Officer, Client Services and Inspections, and
Tr'ondek Hwëch'in

No party requested a public hearing. The applicant did not respond to the interventions.

Prior to making licensing decisions, the Board undertook an environmental screening of the project pursuant to the *Environmental Assessment Act*. The Board is satisfied that any known adverse effects that may be caused by the project are insignificant or can be mitigated with known technology or reasonable work practices.

In making licensing decisions pertaining to this application, the Board took into account the application itself, the Environmental Assessment, the recommendations of interveners, the Board's standard licence requirements and Board policies.

The applicant did not propose alternative approaches to the Operating Conditions in the *Placer Mining Land Use Regulation*. These Operating Conditions have been incorporated into the Placer Mining Land Use Approval for a Class 4 Operating Plan.

The effluent discharge standards and operating standards, which are stipulated in the Yukon Placer Authorization (YPA) and the Fish Habitat Restoration Plan, have been incorporated into the licence to ensure that authorized placer mining sediment discharges and approved stream channel alterations have no significant adverse impacts, including cumulative ones, on fish and fish habitat, and therefore, is considered to be adequate mitigation with respect to the *Environmental Assessment Act*.

The Board noted GY, Client Services and Inspections, identification of the property upon which Jack London's cabin once stood. The Board also noted that the cabin had been removed over 3 decades ago. The Board was informed that this application had been sent to GY, Tourism and Culture and the Heritage Branch had not responded with any indication that the site of the long ago removed cabin was of any historical interest. The licensing officer indicated that following receipt of the intervention, Heritage Branch was contacted by telephone and asked to address the issue. They indicated, verbally, that they saw no reason to preserve a plot of land from which the cabin had been removed.

The Board determined that the location of the removed cabin was of no significant value and the mining of the property could be done as the applicant indicates within the application.

The Board examined the recommendations of the licensing officer contained in Part Six of the screening report and agreed with them for the reasons stated therein.

No term of the water use licence limits the application of any federal, territorial, municipal or first nation legislation.

Sharon L. Cooper
Chairperson
YUKON WATER BOARD

March 31, 2005
Date