

**YUKON TERRITORY WATER BOARD
AMENDMENT OF LICENCE**

LICENSEE: RALPH TROBERG

LICENCE NUMBER: PM00-173

AMENDMENT NUMBER: ONE (1)

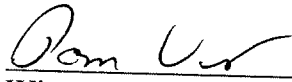
Pursuant to the Yukon Waters Act, Water Use Licence PM00-173 is hereby amended as follows:

1. **Clause 42 is hereby withdrawn.**

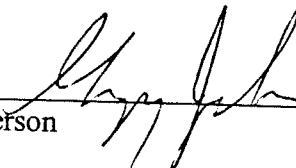
Dated this 21 day of

YUKON TERRITORY WATER BOARD

November, 2001



Witness



Chairperson

YUKON TERRITORY WATER BOARD

Pursuant to the Yukon Waters Act and Regulations, the Yukon Territory Water Board hereby grants a Type B water use licence for placer mining undertaking to:

Ralph Troberg
Box 105
Dawson City, Yukon
Y0B 1G0

LICENCE NUMBER: PM00-173

LICENCE TYPE: B **UNDERTAKING:** PLACER

WATER USE AREA: 2 **STREAM CLASSIFICATION:** IV

LOCATION: Latitude: 63° 58' Longitude: 139° 20'

WATER SOURCE: Boulder Creek a tributary of Bonanza Creek and Bonanza Creek a tributary of the Klondike River

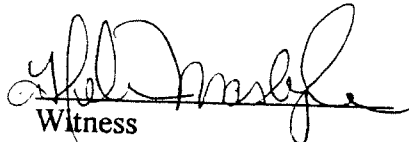
MAXIMUM QUANTITY: 3,273 cubic metres per day

EFFECTIVE DATE: The effective date of this licence shall be the date on which the signature of the Chairperson of the Yukon Territory Water Board is affixed.

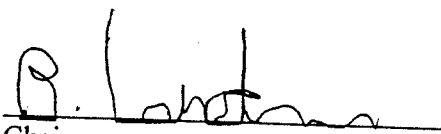
EXPIRY DATE: July 1, 2010

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

Dated this 20th day of
October 2000


Witness

Approved by:


Chairperson
YUKON TERRITORY WATER BOARD

TERMS AND CONDITIONS OF WATER USE LICENCE PM00-173**PART A DEFINITIONS**

"Act" means Yukon Waters Act and any amendments thereto.

"Application" and "Water Use Application" mean Water Use Application PM00-173, including any additional submissions and/or revisions, submitted to the Board by the Licensee.

"Board" means the Yukon Territory Water Board.

"Deleterious Substance" means deleterious substance as defined in Section 34(1) of the Fisheries Act.

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

"Freshet" means the sudden increase in flow carried by a stream as snow melt occurs at higher elevations in the watershed.

"Inspector" means any person designated as an inspector under the Act.

"Instream Reservoir" means any water impoundment structure, where water is collected and retained for use, which is constructed in a natural channel or in a diversion, and through which the entire creek flow may be directed at any time.

"Instream Settling Facility" means a water impoundment structure, pond, or series of ponds where effluent is collected and retained for treatment, which is constructed in a natural channel or in a diversion and through which the entire creek flow may be directed at any time.

"Natural boundary" means the visible high water mark of any lake, river, stream or other body of water where the presence and action of the water is so common and usual and so long continued as to mark upon the soil of the bed of the lake, stream or other body of water a character distinct from that of the banks thereof, both in respect to 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.

"Regulations" means the Regulations made under the Act.

"Special Waste Management Facility" means an operation which handles or disposes of special wastes generated by other persons or operations and which has been approved in accordance with the provisions of the Special Waste Regulations of the Environment Act of the Yukon Territory.

"Watercourse" means any stream, lake, pond, river, 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:
 - a) to obtain water from Boulder Creek and Bonanza Creek at a maximum combined quantity of 3,273 cubic metres per day; and
 - b) to use this water for a placer mining undertaking on claim (grant) numbers 33535, 34503, 34090, 34537, P11351, P11352, P11353, and P12212; and
 - c) to return a flow of water to Boulder Creek and Bonanza Creek, and to deposit waste into Boulder Creek and Bonanza Creek;as proposed in water use application PM00-173 and subject to this licence.
2. If, subsequent to the issuing of this licence, the Licensee uses water and/or deposits waste which:
 - a) has no potential for significant adverse environmental effects; and
 - b) does not interfere with existing rights of other water users or waste depositors; and
 - c) satisfies the criteria set out in column II of Schedule VI of the Regulations,no amendment to this licence will be required for this use of water and/or deposit of waste.
3. Where there is a discrepancy between the water use application and the terms of this licence, the terms of this licence shall prevail.
4. Effluent Quality Standard: Any grab sample at the point of discharge from the final settling facility shall not exceed settleable solids of 5.0 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 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 litreinto 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. Deleterious substances, including, but not limited to, 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 frequented by fish.
7. All work authorized by this licence shall occur on property that the Licensee has the right to enter upon and use for that purpose.

PART C MINING ACTIVITIES

8. A stream channel diversion may be constructed on Boulder Creek only.
9. The Licensee may construct an intake ditch to an out of stream pump pond/reservoir.
10. All instream earthworks, diversions, ditches, spillways and any other water related structures built or otherwise effected for the storage or conveyance of water shall be able to withstand seasonal floods.
11. 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.
12. 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.
13. A protective berm shall be constructed and maintained along the stream channel diversion.
14. Settling facilities shall be provided for all mining waste waters.
15. Available overburden shall be stockpiled for use in future site restoration and such stockpiles shall be located where they will not adversely affect water quality in any watercourse.
16. In those areas where mining will not again occur, tailings and relocated overburden, or other relocated materials, shall be levelled and contoured into low relief piles. The slopes of these low relief piles shall be no steeper than two horizontal to one vertical.

PART D DIVERSION/CHANNEL CONSTRUCTION AND RESTORATION

The Licensee shall adhere to the following conditions regarding construction of all diversions, redirection of the watercourse into the original channel and restoration:

17. The diversion channel width shall be no less than 3.0 metres.
18. The diversion channel depth shall be no less than 1.3 metres.
19. The diversion channel grade shall be between 0.0 % and 1.2 %.

20. The bed and banks of the diversion channel shall be left in a stable condition.
21. The bed and banks of any tributary (gulch or pup) of Boulder Creek and Bonanza Creek shall be left in a stable condition.
22. Class I armouring shall be used, as directed in Schedule I.

PART E SEASONAL CLOSURE

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

23. The mine site shall be left in a stable condition at the end of each mining season.
24. An inspector shall be contacted not less than two weeks prior to seasonal closure.
25. To prevent flood damage during freshet, the water intake ditch shall be blocked and the diversion ditches shall be constructed and maintained to withstand and convey flood flows.
26. Spring freshets shall not be routed through work areas. Where diversion channels around working areas are built or excavated, they shall be open in preparation for spring freshet.
27. 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 F DECOMMISSIONING

Upon final decommissioning and/or expiry of this licence the Licensee shall:

28. Ensure that the final creek channel approximates its pre-licence condition in length, gradient and stability, except as may otherwise be required in this licence; and
29. Level and re-contour tailings and relocated overburden, or other relocated materials, into low relief piles. The slopes of these low relief piles shall be no steeper than two horizontal to one vertical; and
30. Ensure that all dams and dikes across stream channels are removed; and
31. Contact an inspector not less than two weeks prior to final decommissioning.

PART G REPORTS, SAMPLING, & ANALYSIS

32. Where there is a surface discharge from the settling facilities, the Licensee shall take weekly samples at a point upstream of the water supply intake and at the point of discharge from the final settling facility, and shall analyze these samples for settleable solids, using the Imhoff cone one hour test.

33. Where no discharge from the settling facility to a receiving stream occurs, whether by surface discharge or seepage, no sampling is required.
34. On or before the anniversary of the date of 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.
35. The report shall describe:
 - a) the quantity of water used under the licence, and
 - b) the quantity, concentration and type of any waste deposited under the licence, and
 - c) shall include all data collected as a result of any sampling which is required by this licence, and
 - d) shall include any seasonal reclamation that has taken place.

PART H GENERAL CONDITIONS

36. The expiry date of this licence shall be July 1, 2010.
37. 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 the Yukon Territory.
38. The location of subsurface grey water pits and/or pit privies shall be not less than thirty (30) metres from the high water mark of any watercourse and at least 1.2 metres above bedrock or the water table.
39. If very permeable soils are encountered, the pit privy or grey water pit shall be lined with 0.6 metres of sand or silt.
40. All garbage and refuse shall be kept in a covered container until removed from the site or, where appropriate, incinerated and buried under not less than one (1) metre of compacted soil in pits located not less than thirty (30) metres from the natural boundary of the watercourse.
41. The Licensee shall immediately contact the 24-hour Yukon Spill Report number (867) 667-7244 should a spill or unauthorized discharge occur. A detailed written report on any such event, including but not limited to, dates, quantities, parameters, causes and other relevant details and explanations shall be submitted to the Board no later than ten (10) days after its occurrence.
42. Stationary fuel storage and pumping shall conform with the requirements of the National Fire Code of Canada.

Water Use Licence PM00-173

43. No term of this licence limits the application of any other Federal, Territorial or First Nation law.
44. In the event that the Licensee fails to comply with any provision or condition of this licence, the Board may, with the approval of the Minister and subject to the Act, cancel the licence.
45. Where any direction, notice, order or report under this licence is required to be in writing, it shall be given:

To the Licensee, if left at or mailed by registered mail to the address which appears on the signature page of this licence and shall be deemed to have been given to the Licensee on the day it was left or seven (7) days after the day it was mailed, as the case may be; or

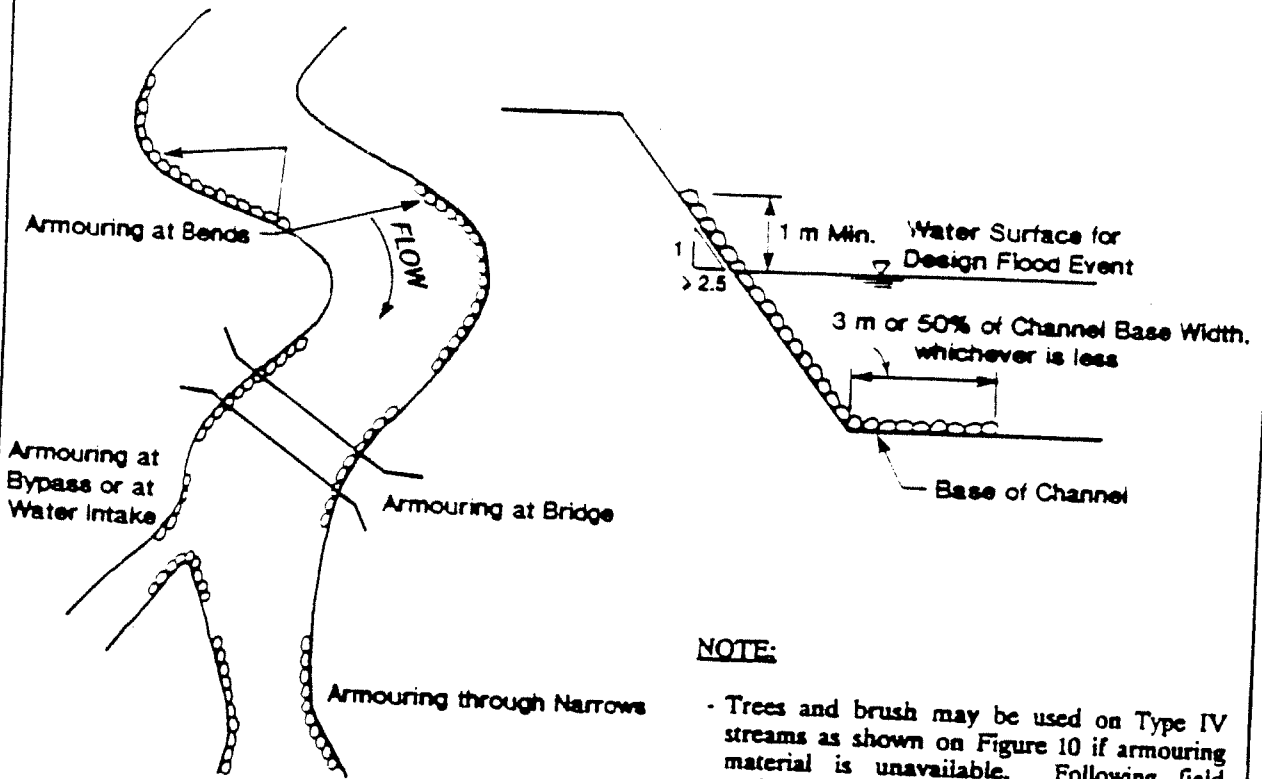
To the Board, if faxed to (867) 668-3628 or left at or sent by registered mail to the following address:

The Yukon Territory Water Board
Suite 106, 419 Range Road
Whitehorse, Yukon Y1A 3V1

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

If normal mail service is interrupted by strike, slowdown, force majeure or other cause a notice sent by Registered Mail will not be deemed to be received until actually received and the party sending the notice shall, if possible, deliver such notice in order to ensure prompt receipt thereof.

SCHEDULE 1



NOTE:

- Trees and brush may be used on Type IV streams as shown on Figure 10 if armouring material is unavailable. Following field evaluations, this technique may be deemed acceptable for Stream Types II and III.

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 TERRITORY WATER BOARD
REASONS FOR DECISION

The Yukon Territory Water Board ("the Board") has made licencing decisions with respect to the following application for water use for placer mining purposes:

PM00-173- Ralph Troberg

Notice of application was provided in accordance with the requirements of the Yukon Waters Act and the Yukon Placer Mining Land Use Regulations. In response, the Board received interventions from Fisheries and Oceans, Canada ("DFO") and Indian and Northern Affairs, Canada ("DIAND"). No party stated that they wished to make representations at a public hearing.

Prior to making licencing decisions, the Board undertook an environmental screening of the project pursuant to the Canadian 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 licencing decisions pertaining to the application, the Board took into account the application itself, the Environmental Assessment, the recommendations of interveners, the Board's standard licence requirements for type IV licences and Board policies.

No term of any licence limits the application of any Federal, Territorial or First Nation law.

DIAND Mineral Inspections recommended the applicant be required to supply a combination of seeding and fertilizing in areas where no topsoil is available for re-vegetation reclamation purposes. The applicant indicates a procedure of using whatever soil is available to reclaim areas. Fine tailings will be used to cover re-contoured areas.

DFO recommends limiting diversions to Boulder Creek. The applicant has only requested diversion of Boulder Creek and the licence will reflect that on Boulder Creek water channel can be diverted.

DFO recommends that instream settling not be permitted. The applicant has not requested instream settling and the Board determined that rather than prohibiting the use of instream settling, the absence of consent to allow is sufficient indication that such a practice is not permitted.



Chairperson
Yukon Territory Water Board

October 20, 2000

Date