

Kootenay Lake District Office R. R. # 1 Ridgewood Road Nelson, B. C. V1L 5P4

August 24, 1981

File: Mineral Claims: Kena Claim Group

Kerr Addison Mines 703 - 1112 W. Pender St. Vancouver, B. C. V6E 2S1

Gentlemen:

Reference is made to my recent conversation with Mr. Harold M. Jones and your operations presently being conducted on the KENA Claim Group located approximately 7 kilometers South of Nelson.

To date we have not received an approved form 10-11 (Notice of Work on a Mineral Property), however, I have been advised today by the Ministry of Mines, that approval will be forthcoming shortly.

A brief examination of your operations has revealed that Ministry of Forests standards have not been wholly complied with.

You are hereby instructed to complete the following prior to cessation of operations and in no case later than September 10, 1981:

- 1. Culvert at Gold Creek crossing; remove <u>all</u> material deposited in stream channel and culvert entrance on upper side of road. It will be necessary to do this work by hand methods only.
- Location where attempt was made to re-route road around wet area (approximately 1km from highway); all trees, branches and debris shall be bucked and hand piled in a manner suitable for burning. Burning will be conducted by the Ministry of Forests.
- 3. Cross-ditching; existing cross-ditches to be upgraded where necessary to accommodate Spring run-off and cross ditches to be constucted at frequent intervals in particular on long continuous gradients. See section 3 (d) of the attached Road Drainage Requirements.

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- 4. As I mentioned previously, only a brief examination of your operations was made. In addition to 2. above, please ensure that all accumulations of slash and debris resulting from drill site construction, road improvement etc., are disposed of in accordance with the attached N.F. 56.
- 5. Please ensure that in future an approved 10-11 form is in hand prior to commencement of operations. Unauthorized operations are subject to suspension and may result in trespass charges and other penalties as provided for in the Forest Act.

Please advise this office when items 1. to 4. above have been rectified. If you have any questions, please contact the undersigned at the above address or by phoning 825-4415.

Yours truly,

R. J. Bourdon

R. A. Timber

RJB/jas

cc: Ministry of Mines, Attn: R. Mellor

H. M. JonesO. Janout

(line cutter) John Teboulte Salmo 357-2440 Will provide J-D cat to make walv bars on word, will also hard cut shash at corduray area

Otto Janout 825-4792

and Other Exploration Works)



Kootenay Lake District Office R. R. # 1	Nelson		, B. C.	
Ridgewood Road	· .	August 24	19 81	
Nelson, B. C. VIL 5P4	File:		on Mineral Claims,	
		Mining Propert	ties, Coal Licences	

Kerr Addison Mines 703 - 1112 W. Pender St. Vancouver, B. C. V6E 2S1

Gentlemen:

Re: Hazard Abatement and Timber Values on Mineral Properties/Claims, Coal Licences, or Other Exploration Works

We have been informed by the Ministry of Energy, Mines and Fetroleum
Resources that you propose to carry out linecutting, drill site construction and road improvement work in connection with your exploration and mining activities at Kena Claim Group

Before you commence operations on the above mentioned areas, we would like to inform you of our requirements regarding the disposal of the slash and the assessment of the forest values.

SLASH DISPOSAL MEASURES

Main Roads

All trees must be felled onto the right-of-way prior to construction. Trees not utilized and the slash resulting from the right-of-way clearing must be disposed of by either burying as approved by the Forest Officer, or piling and burning on the right-of-way. Disposal must be kept concurrent with the right-of-way clearing and burning of the piles must be carried out at the first safe opportunity, subject to obtaining a burning permit from this office.

Temporary Roads, Induced Polarization Lines and Drilling, Trenching, Stripping, and other Similar works

All branches must be cut off from all felled trees. The bole of the tree must be bucked so that each section lies close to the ground. All branches shall be scattered in such a manner as to lie close to the ground and shall be cleared of all standing trees.

Any trees which are pushed or knocked over or otherwise caused to lean in connection with any of the above operations must be felled. The tree must be bucked into lengths so that each section lies close to the ground. All branches must be cut from all felled trees and scattered in such a manner as to be close to the ground and shall be cleared of all standing timber.

any slash that is created during the exploration or mining operations which constitute a hazard and is not disposed of as mentioned above may result in an order being issued under authority of Section 117 of the Forest Act.

Unforeseen Hazards:

If any hazard develops which has not been covered above, the local Forest Officer will issue special instructions for its abatement.

Ercsion:

Upon final cessation of operations or at any other time as instructed by the Regional Manager, the operator shall take such measures as directed by the Regional Manager to prevent erosion and to rehabilitate the site. In the event the operator fails to carry out the above measures, the Regional Manager may assess the operator the estimated costs to carry out such measures, and the operator shall forthwith pay the account.

ASSESSMENT OF FOREST VALUES

Under Section 10 of the Mineral Act, subject to Section 45 of the Forest Act, the holder of a mineral claim is entitled to a free use permit to use the timber on the claim for the exploration and development of the claim. Also, if there is not sufficient timber for these purposes on the claim being worked, the holder may obtain a free use permit over vacant Crown land for timber required for certain facets of mineral exploration or mining development.

Where any timber values must be cut to facilitate mining operations, it will be necessary to obtain through this office a licence to cut. Where there is a market for the timber, the mining operator must deck the logs for disposal by the Ministry of Forest. Where such timber is sold, the miner will be reimbursed for the costs of felling and decking. Where the timber is not sold or utilized, the operator will be billed at current appraised rates. Immature timber values damaged or destroyed will be also billed at current appraised rates.

There the cutting of timber is of such intensity as to leave only scattered trees of marginal residual value, the timber, including immature, on the entire area so affected will be considered as if cut and assessed.

At this time I would like to draw to your attention that it would be to your advantage to discuss slash disposal measures, cutting of timber values, environmental, fish and wildlife requirements with this office prior to the commencement of any work on mineral claims or mining property.

Yours truly,

R. J. Bourdon

R. A. Timber

RJB/jas

H.F. 56(3) (May/79)

ROAD DRAINAGE REQUIREMENTS

1. Objectives

<u>Drainage structures</u> are to be provided to enable the <u>natural land drainage</u> flow to pass from one side of the road to the other with <u>a minimum of</u> diversion from the natural course.

2. Definitions

- (a) <u>Drainage structures</u> mean permanent culverts, roadside ditches, cross ditches or any other structure required for drainage of the road.
- (b) Natural land drainage flow means all creeks, streams, rivers and all ground water flow, all seepage, and all surface water flow.
- (c) A minimum diversion from the natural course is a diversion of water flow which does not result in erosion of soil.

3. Methods

To achieve the objectives specified above, the following structures and drainage methods will be required.

(a) Stream Crossings

- i. At stream crossings bridges or culverts should be of sufficient dimension to contain peak water flow.
- ii. Culverts should be placed in the natural creek bed where possible.
- iii. Culvert inlets should be protected by debris barriers where there is a strong possibility of the culvert becoming plugged with wood debris.
- iv. A culvert inlet or outlet should be protected by rock riprap, cribbing or other protection where there is a possibility of erosion of the fill material which surrounds the culvert.
- v. Small creeks should not be diverted into roadside ditches.

(b) Roadside Ditches

- i. Ditches should be of sufficient dimension to contain intercepted ground water flow, surface water flow and drainage water from the road and road surface.
- ii. Ditches should be of sufficient depth to drain water from the subgrade.

(c) Cross Drain Culverts

- i. Permanent cross drain culverts are to be provided to remove water from roadside ditches and to return the water to the ground below the road.
- ii. A sufficient number of cross drain culverts are to be provided to relieve water flow in the roadside ditch before water flow reaches a volume and velocity which will result in erosion of the roadside ditch.

iii. Where a cross drain culvert discharges water over erosive fill material, a down-spout or other means of protection should be installed.

(d) Cross-Ditching

i. On cessation of operations, cross-ditches shall be constructed parallel to and below cross-drain culverts in order to protect the road in the event of culvert failure. i.e. plugged culvert or flow exceeds culvert capacity. Particular attention must be paid to long continuous gradients, and on such gradients it will be necessary to construct cross ditches at frequent intervals.

(e) Precautions on Steep or Long Continuous Gradients

NOTE: Erosion is common on steep or long continuous gradients since water is often diverted down hill along the road.

- i. Culvert inlets at creek crossings are to be moulded to prevent diversion of water from the creek to the road.
- ii. Cross drain culvert inlets should have a ditch block installed in the ditch line at the lower side.
- iii. Cross drain culverts may be angled diagonally across the road to facilitate water flow. (See table below).

(f) <u>Installation of Metal Culvert Pipes</u>

- i. Metal culverts shall be properly bedded and backfilled with selected and properly compacted material.
- ii. A metal culvert pipe should have a cover of fill of a depth not less than one half the diameter of the pipe.

CULVERT LENGTH AND SKEW FOR ROAD CLASS 6, 4 METRE SUBGRADE ADJUSTED FOR SLOPE

%	GRADE	SKEW	LENGTH 300 MM		LENGTH 500 MM		LENGTH 700 MM	LENGTH M 800 MM DIA	LENGTH M 900 MM DIA.
0	∸ 3	Ni1	7.5		8.0		8.5	9.5	10.0
	. 4	3D	7.5		8.0		8.5	9.5	10.0
	5	6D	7.5		8.0		8.5	 9.5	10.0
	6	9D	8.0		8.5		9.0	9.5	10.0
	7	12	8.0		8.5	•	9.0	9.5	10.0
	8	15	8.0		8.5		9.0	9.5	10.5
	9	18	8.0		8.5		9.0	10.0	10.5
	10	21	8.0	÷	9.0		9.0	 10.0	10.5
	11	24	8.5		9.0		9.5	10.0	11.0
	12	27	8.5		9.0		9.5	10.5	11.0
	13	30	8.5		9.0		10.0	10.0	11.5
	14	33	9.0		9.5		10.0	11.0	12.0
	15	36	9.0		9.5		10.5	11.5	12.0
	16	39	9.5		10.0		11.0	12.0	12.5

Length of Culverts in fills must be calculated individually knowing depth of fill.

MAIN ROAD RIGHT OF WAY CLEARING SPECIFICATIONS

All trees, snags and brush on the right-of-way shall be felled or pushed away from the marginal timber and all slash and debris created shall be disposed of as follows:

1) Material 17.5 cm and under

All material 17.5 cm and under shall be piled not less than 4.6 m from marginal timber and burned concurrently as conditions permit.

2) Material 17.5 cm and over

All material over 17.5 cm shall be commercially disposed of wherever possible. For clarification, all material 3 m in length with 17.5 cm butt and a 10cm top is considered as merchantable. Where this material cannot be commercially utilized, it shall be disposed of with the small material as mentioned above. Where this is not possible, the boles of trees 17.5 cm in diameter and over must be bucked so that they are in close contact with the ground throughout their entire length, and are placed not less than 3 m from the marginal timber. Stumps, when pushed clear of the ground and not burned, may be scattered singly near the edge of the right-of-way.

3) Margin and Danger Trees

No slash or debris shall be pushed into the marginal stands. Leaning or damaged trees in the margins resulting from right-of-way clearing shall be felled and they, along with any other danger trees felled in the margin, shall be removed and dealt with as in Section (1) above.

4) Burning

During the period as proclaimed, a permit to burn must be obtained from the Forest Officer before any fires are lit. A burning permit is issued for a definite period and all fires must be totally extinguished at expiry date of the permit.

5) Burying

Disposal of slash and debris by burying is an alternative method that is acceptable under certain circumstances. This method shall not be permitted where the side slope is less than 20% and it will be encouraged where the side slope is in excess of 50%. Generally the method will be discouraged but where it is allowed, the following guidelines shall be followed:

- a) The slash and/or trees shall be bucked into maximum lengths of 4.6 m or as otherwise directed by the Forest Officer.
- b) Prior to burying, all material to be pushed together and compacted with a crawler tractor or other suitable equipment.
- c) Buried "piles" shall be made so as to conform as much as possible with existing ground forms and must not interfere with any water courses.

- d) The compacted slash must be covered with sufficient soil to prevent exposure by future wind and water erosion.
- e) The location of buried slash must be planned to avoid interference with future road improvements and/or other developments.
- f) Close supervision must be maintained at all times to ensure that these requirements are met.

6) Fire Prevention

All regulations for forest fire prevention must be fully complied with, as required by Part X of the Forest Act.

7) <u>Litter</u>

The terms and conditions of the Litter Act will apply. No person shall dump or discard any rubbish, garbage, bottles, cans, equipment parts or waste materials on any land or fresh water.

8) Environment Considerations

In all phases of the clearing operation careful consideration should be given to the prevention of erosion, the prevention of stream siltation, and to the protection of the natural habitat of fish, game and other wild life.

Within .4 km of any River, Railway or Public Road Crossing, all material not utilized shall be completedly disposed of by piling and burning. In no case shall any trees, logs, logging debris or any other substance be felled or deposited within any lake or stream.

The visual characteristics of accumulations of stumps and debris may be ameliorated by seeding grass, legumes and other plants. Seeding is effective when combined with the burying and compaction methods described above.

