

Mr. D. Parsons,
Bloomfield,
via GRETNA, Tas.

Dear Sir,

The following short report deals with conditions as I saw them at the time of my visit to Bloomfield.

The Dam

From the state of the Dam when visited it was obvious that the byewash had not been taken to sufficient depth to ensure safety. Damage was done to the upstream side of the filling when the two valves were opened as the result of suction caused by the proximity of the intake to the freshly stacked earth. It was obvious that this earth had not been hard packed for the underlying material was packed firmly. As pointed out on the job, the base of the dam was rammed hard by the bulldozer whilst excavating the stream bed. When that had been completed, filling from the hillside was obtained and in the process of filling, a roadway was built across the stream. This roadway was had packed by the bulldozers frequent passage but the remaining fill was loose packed. The upstream portion of this loose fill was washed away when the valves were opened. The downstream side of this loose fill is showing signs of settling and should become firmly settled with time. It is unfortunate that the rains came before the fill had time to settle.

To make the dam safe

- (1) The byewash needs deepening and
- (2) The dam wall needs raising until there is at least 5 ft. difference in level;
- (3) The fill adjoining the byewash needs protection by logging or planks to prevent scouring;
- (4) The upstream side of the dam should be strengthened by placing a couple of heavy logs at its base in the vicinity of the intake to the pipe line. This will help to prevent further scouring;
- (5) The dam should be sown with grass to prevent erosion.

The Road

Inspection of the road led to the belief that there would be little danger of damage even though the dam should collapse.

The road has been well constructed and the stone wall has had ample time to settle. It would therefore withstand a reasonable flood.

Between the dam and the road there are several areas of flat land over which the water would have to flow. Some of the flats are extensive and it is felt that the force of the water would be spent before reaching the roadway.

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To sum up:

The dam, in its present condition, could not be regarded as a good insurance risk but the road is a good risk.

Yours faithfully,

Sgd. H.G.W.K.

(H.G.W. Keid)
CHIEF GEOLOGIST.