

some criticism by the hon. member for Davenport (Mr. MacNicol) with respect to the removal of some tanks—presumably oil storage tanks—across the stream, for other purposes. One tank was moved as a water reservoir for protection purposes. It can readily be understood that in a plant like this, which processes inflammable materials, it is necessary to have most complete protection against fire.

There have been some exaggerated statements made respecting the town site. If this process was to be given a fair test, it was necessary to provide facilities for the people who would be doing the work. The committee should remember that this whole operation was still very much in the experimental stage a point to which I shall refer in greater detail in a moment. It contemplated operations which might last over a considerable period of time. If employees are working in a plant, particularly one located several hundred miles north of Edmonton, they must at least be given comfortable quarters, or reasonably comfortable quarters, in which to live.

I am not saying that here and there mistakes might not have been made. I confess frankly that I am no more competent than any other member of the committee to judge on that point. But I do wish to dissociate myself fully from any criticism that there was reckless and foolish expenditure of money. There was not.

I have no doubt hon. members will be fully aware of the fact that in the last few years it has been extremely difficult to get the necessary labour to carry on this work near Waterways. There is no place in Canada where labour has been more difficult to secure in the last two years than it has been in northern British Columbia and northern Alberta. There has been work in connection with building the highway for military purposes from Terrace to Prince Rupert. There has been the Canol project in the Mackenzie River valley. Then, the building of the Alaska highway made heavy drafts on labour, and it was very difficult to get the labour required to carry on the work of, shall I say, rejuvenating the Abasand company's plant at Fort McMurray.

Another difficulty arose in connection with the priority on materials and equipment. As hon. members know, materials have been scarce, and this fact contributed to delays in having the work completed. It is now, however, pretty well advanced. The separation plant is practically completed, and it is anticipated that the changes in the refinery will be completed by September 1. We shall then have a well-balanced plant, and one which can be efficiently and, we hope, economically operated.

[Mr. Crerar.]

But let me add that this does not provide a commercial plant for commercial purposes, a fact which I cannot emphasize too often. After all, this is an experimental plant, or, if you like, a pilot plant. There are many problems to be solved before the exploitation of these sands can result in commercial success. There is nothing new in that principle. For instance, I remember the facts associated with the formation of one of the larger mining companies in Canada, the name of which I shall not give.

They found a large body of base metal ore of a very complex character, completely new in mining experience. There was no question that the body of ore was there and no question that it had base metal elements in it, but there was no known process by which this ore could be treated to extract the metals from it. The whole project started with experimental work in the laboratories of the department of mines in Ottawa and in a mines laboratory in Denver, Colorado. The company spent approximately one million dollars in building a pilot or experimental plant. After it had been constructed the company found that they had to make changes in it. They found that the experience derived from the laboratory tests did not always carry through when it came to large scale operations. That case is analogous to the plant of the Abasand company. When it gets into operation it will, I am convinced, be on a basis that will afford the fairest possible test of what can be done with the bitumen in these tar sands.

Mr. JOHNSTON (Bow River): When do they expect to get into operation?

Mr. CRERAR: The separation plant will, I hope, commence operations on June 1, and the refinery about September 1. It is necessary if you are going to have a fair test to operate the year round, because you might have a process that might work well in summer and not work nearly as well in cold winter weather. So that in order to have a commercial development you must find a process that can operate three hundred and sixty-five days a year. That I think will be apparent to everyone.

I come now to practically the concluding part of what I have to say, and here I wish to sound a note of caution about the possibilities of these sands. The Consolidated Mining and Smelting company submitted a considerable sample of the bitumen to Universal Oil Products, a firm of oil chemists—I do not know whether I am describing them quite correctly—in the city of Chicago who have had long and varied experience in work of this kind. They tested the bitumen that was