Accounting of Mine Transportation Costs. (Red Point Mine)

Directly, or indirectly, the salable metal production of a mine pays all the transportation costs that are charged against ore, fuel, supplies, mining plant, and the metal itself, from the moment the business begins by the investment of labor or capital in the mine till the metal itself by sale ceases to be production and becomes consumption. The percentage of the total sale value of the metal that this aggregate of transportation costs consumes as cost is surprisingly large. It is with difficulty realized without the making of the detailed analysis of all the cost items into which transportation enters as a sub-item.

With the industry of gold mining, separate by itself from other metal mining, the paying from the gold production of the transportation costs is clearly apprehended. With other metal mining the idea that part at least of the transportation costs is paid by the consumer would, on first statement, seem so



Mine Buildings and Plant at Tunnel Entrance, Red Point Mine, Placer County, Cal.

reasonable that it would be accepted as true. An analytical consideration of the proposition, however. demonstrates that it is untrue, and that the producer pays all of the transportation costs. With silver the production pays the transportation costs, as the sale price is fixed by the general commercial trade conditions of India and China, which

have absolutely nothing to do with the mining. With lead, copper and zinc the transportation costs are also paid by the production. The sale price is fixed by a combination of producers. The consumer must pay what the combination asks for these metals or do without. From the standpoint of one in the combination the freight is paid by the consumer, but the outside producer cannot so regard it. He cannot add to the other cost items the total of transportation charges and then add his profit to make a selling price. He must, if he would do business, first deduct from the selling price the transportation cost, and make the remaining costs aggregate a less sum than what remains of the selling price after the deduction.

While not the fact to say that the transportation cost is not considered by the average mine operator, it is the fact that it is seldom taken into account at the beginning of the enterprise, and even less rarely given consideration by analysis in detail. It is the purpose of these lines to suggest to mine operators to make an analytical examination of the transportation cost their metal production is paying; and, also, where the business is yet in the projection stage, contemplated but not established, to suggest

the making of an estimate of transportation cost with the same care and to the same detail that the examination of ore values is made. Some mine operators have done this, and limited as are the opportunities left by the community of interest in the transportation business for the mine business

management to make economies, these operators have made economies productive of increased profit to them.

Where cost keeping has been made a part of the mine business, transportation has been carried in not more than two accounts, and sometimes in only one. In the latter case, independent of the actual incidence of the charge, whether from construction, mine



operation, or ore or metal reduction, and selling, it is lumped as freight. Where two accounts are kept, one is for freight charges on everything coming to the mine; the other, on ore or metal leaving it. A third one, if kept, deals with the cost of transportation of the ore in the mine. This last has, in distinction from the others, received close attention, and economies have been successfully made by proper constructive use from the facts disclosed by the cost account. In some systems of mine accounting, freight or transportation cost is split up on the vouchers into parts, which are direct charges against other cost items in the accounts and added to these other costs, the sum only being entered. This is a closing out of the transportation costs from the accounts altogether. Also, the practice has developed, through the ore reduction works paying the charges to the carrier from the metal yield of the ore reduction, of one charge being made by the reduction works which is directly inclusive of the transportation charge and the reduction charge on the ore, and indirectly inclusive of the transportation and selling costs of the metal from the reduction works to the consumer.

With the general accounting practice directed to covering up and concealing the facts as to transportation costs, the beginning of their analysis is not a simple matter. It can only be simplified by changing the system of accounting so that the mine business accounts do show the facts. There should be no arbitrary limitation on the number of subtransportation cost accounts. Two general divisions or groups should be made. The first includes the transportation costs which are part of the investment in plant or its maintenance during its life. These are capital charges. The second includes all the transportation costs of current operation, and in keeping them there are many subdivisions that are necessary to intelligent use of the data.

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