

MINING COSTS*

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It is with some misgivings that I undertake, at the request of the officers of this convention, to lead in the presentation of the subject "Mining Costs." This is not because the subject is one unworthy of your time and attention, nor that my study of it has been meagre or superficial, although doubtless a more experienced and capable leader might easily have been chosen for the service, but because the matter of the proper construction of mining cost accounts and the use of the same by those vitally interested does not usually receive the attention and consideration which it deserves. Perhaps this fact influenced your officers in introducing a paper on the subject and inviting your attention to its consideration and discussion. However this may be, I believe that the subject is one of great importance and I therefore have consented to discuss it, more in the hope of emphasizing some things which we all know more or less, but sometimes forget, than of presenting any new or startling views upon it.

First. Who are interested in mining costs? The foremen, superintendents, general managers, executive officers, boards of directors and stockholders—the viewpoints of these respective classes are different, but all are, or should be, greatly concerned to secure the truth, the whole truth and nothing but the truth. Carelessness and indifference as to statements made are, in the last analysis, of the same texture as wilfulness and misrepresentation and frequently lead to the same disastrous results.

Second. How may these statements be made to most accurately and clearly set forth the information concerning actual conditions, which is so necessary to those whose capital and reputations are at stake?

The limit of time you will fix for the consideration of this subject, among the many other important matters which are to engage your attention, makes it necessary for me to avoid details as much as possible—to outline rather than elaborate.

Interest.—Interest on capital invested in lands, mining rights, plants and equipments, and discount on bonds issued against such investments, should not be charged to mining cost. Interest on bonds sold for the purpose of constructing specific plants is commonly charged to such construction cost up to the time when the plants are ready for operation, but this practice easily runs into an abuse and a misrepresentation to bondholders, stockholders and the public. An operating company will not err but rather commend itself to all concerned by holding to an absolute rule not to capitalize interest under any circumstances. Many companies in the past, which sold bonds for less than face value, charged such discount to property or construction account. This practice is now less common and will doubtless gradually disappear in companies which wish to be credited with conservative management and frankness in reports to stockholders and the public.

Taxes.—Taxes in an operating company should be charged to operations, never to property. The amount of tax chargeable to the operation of a given mine ought to be, as nearly as may be, the tax upon the land which will ultimately be operated through that mine. The tax for a given year should be apportioned in equal amounts over the divisions of the year for which cost statements are made.

Royalty or Property Depletion.—The value of coal or mineral rights, at cost, should be extinguished at a charge to operations in a fixed amount per ton or per acre as the property is exhausted. Some companies have revalued lands on their books and so created a surplus. This, in probably almost every case, was not a wise thing to do. Assuming that the transaction was thoroughly honest in intent, properly shown on the books of the company as a surplus not derived from operations, and properly followed up by increased charges to future operations for exhaustion, it will appear in the last analysis to be simply reaching into the future. I would say, therefore, that while such revaluation in some cases may seem to be justified, in most cases it is a thing which ought not to be done. If the lands are really worth more from year to year than their first cost, the fact will be reflected in increased selling value of the product. The difference of value, believed or hoped to exist, ought not to be put into surplus account in advance of actual sales of product, thereby increasing in a fictitious way in corresponding amount the mining cost of the future—in other words, it may be said to be always wiser and more conservative to book earnings as they are actually realized, not as anticipated or hoped for.

Depreciation of Plant and Equipment.—There is, perhaps, no single phase of accounting, whether of mining or manufacturing companies, more complex or troublesome than this matter of plant and equipment depreciation; hence nothing in which there are more differences of opinion and method of procedure among operating companies; I might add nothing in which managements and accountants may more easily and with the best intentions deceive themselves and each other. The views, plans and methods herein set forth are, therefore, not necessarily standard—they are more or less the result of my personal study and experience.

Up to the time when a mine is placed on an operating basis, that is when it is ready to produce the daily tonnage for which its development, plant and equipment were planned (regardless of what it actually does produce at that time, determined perhaps by the law of supply and demand, labour or weather conditions or car supply) all expenditures for development, plant and equipment should be charged to construction account with credit to that account for product sold in the full sum realized for the same. After the projected development has been completed and the mine placed on an operating basis, all expenditures made during the whole course of its life, whether for development, air shafts, road extensions, mine cars, mining machines, motors, power houses, power equipment or lines, or anything that may be installed, should be charged to operations, unless such expenditures result in positive increase of capacity, in which case they may be charged to capital investment with a proper regard to the question of the length of time that such additions may reasonably be expected to serve.

Further charges should be made to mining cost monthly in fixed uniform amounts, with credit to a fund account generally known as plant and equipment depreciation fund, for the replacement of capital originally invested in such development, plant and equipment, or for the replacement of units which wear out or become obsolete. The extent to which this fund

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