

The Story of an Industry



I've taken my first road trip for my new company this month, and typical of a Flashback Tuesday, I went to the mine I worked as a metallurgist at 10 years ago. And as all things at a mine, the people are different but the mine is the same.

Although that isn't really the truth. For this trip, I didn't get out of the lab or the plants, neither of which hadn't changed structurally from the last time I was there. But, if I had gone travelling out on the mine roads, I'm pretty sure I would have gotten lost pretty quick. One thing that is always changing at an open pit mine is the landscape.

Mining from an open pit, obviously, means ground gets removed from it for processing or piling in a waste dump. So, over time, the pit gets bigger. New piles of rock are formed while old piles get either processed or moved. And in doing so, roads used by mining equipment get redone, rerouted, remade, re-everything. I remember visiting a mine in Arizona years ago where a US State highway was being moved for the fourth time in a decade as the pit expanded. That mine also had a picture dated from 1866 showing a mountain with a mine entrance and an ore car on rails coming out of it. That mountain is now a rather large hole in the ground.

Getting back to the people, there were a few of the older ladies working in the lab who remembered me, which is odd since I only visited the lab every now and then. I must have made an impression since there has been a revolving door of metallurgists going through the operation since before I was there. But, I didn't recognise a single professional person on the sight, except a few gentlemen who, like me, are on the down side to retirement within the next 4-7 years. In the three years I was there, fifteen metallurgists came and went. That's some heavy turnover for such a large operation and there were four reasons. The first was a not very good manager, but he left before I did and the turnover did not seem to slow. So, the other three reasons must carry more weight.

Although these three reasons can be seen in many different heavy industries, it is even more prevalent in mining. The first is demographics. The old guard of baby boomers are retiring, leaving the smaller cohort behind them in charge. That increases the demand for these experienced people and they become followers of the almighty dollar and the chance to lead much earlier than their more senior retirees ever had.

The second reason is economics. The mining industry did not have a large influx of engineers for about 20 years starting around the recession of 1981. You will find very few engineers in their 40's right now. So, in essence, the smaller cohort of people coming into the industry is actually two cohorts behind the retiring baby boomers. Their advancement speed in mining is now fairly fast. I have met process managers in the mid 30's, something that was unheard of when I started out back in the early 80's.

The third reason is very clear. If you were about to enter university in, say 1990, would you choose a career in mining, where it is dirty, the pay isn't the greatest, the industry isn't hiring much, innovation is almost a four-letter word and you had to live in a very remote location? Or would you prefer, well, just about any other career? Because mining did not do a lot of hiring through the 80's and 90's, less and less people went to school for it. By the late 90's, universities had significantly shrunk or closed down their mining faculties all over the US due to lack of demand. Now that the industry is having a significant talent drain, the demand is back. You get a metallurgical engineering degree now and you could be running an entire mine site inside of 10 years if you play your cards right. The schools are trying to ramp back up, some pretty much from scratch. Up in Canada with public universities, they are all pretty much still intact. Not so in the US. And to make matters worse, the number of PhD's in mining disciplines is also very limited, leaving these newly ramped up faculties short of educators. Right now, you can't swing a dead cat at a mine or a mining school without hitting a few Canadians, Australians, South Africans, Chileans, [insert several other mining nationalities here]. There aren't enough Americans to fill the need. The US national mining society has established a lucrative grant program to build up the supply of professors for the nation's mining schools.

It's a great time to go into mining. Even real innovation is starting to take hold. But, she has a long way to go yet.

Now you know why started writing novels. I suppose I will eventually have to write a murder mystery that takes place at a mine site. There are so many ways you could kill a person. [evil laugh].