

# Women in the Mining Industry

E J Wynn<sup>1</sup>

## ABSTRACT

*This paper examines the role of women in the mining workforce, specifically female mining professionals, and is given from a student's point of view drawing primarily on vacation employment experiences. The suitability of females to the mining environment and ability to complete tasks is discussed. This includes their having an appreciation of the mining culture, recognising ideal qualities of mining professionals and understanding the issues related to women entering the industry. An understanding of these topics is important for everyone wishing to enter the mining industry.*

## INTRODUCTION

Many companies in Australia have policies on equal employment opportunity, recognising the equality that exists between men and women in the workforce. This is represented by the relatively balanced composition of the Australian workforce, in 2000 comprising 43 per cent females overall and 49 per cent females in technical and professional roles. However, female participation rates within the Australian mining industry in 2000 were 14 per cent overall and 18 per cent in technical and professional roles. These figures are from ABS Labour Force Australia 1980 - 2000. Clearly, there is a great deviation in the average female participation rates in the Australian mining industry compared with the average rate across all industries in Australia.

## THEORY AND PRACTICE

Where a university degree is essentially theoretically based and obviously removed from site, it is important to gain exposure to operations. The training of mining professionals comprises two components – theory and practice. The respective environment in which these components are taught can vary greatly. While there is a culture associated with university studies, one also exists for the mining industry. The mining culture is a function of the composition of the workforce and community as it is defined by the attitudes and beliefs held by these people. Mining communities can be located in small, isolated areas serviced by camps or townships with a dominant male population and an above average income per capita. This combination can cause social problems for these communities. Unless there is an increase in the number of females working to help return some natural balance to these towns, undesirable social conditions can be anticipated. It is important not to formulate an idealised picture of what work as a mining professional entails if you are serious about enjoying a long-term career.

### Lifestyle

The reality is that as well as having the skill and ability to work effectively, you also need a commitment to the lifestyle associated with the industry. Although work may be satisfying, the time spent after work hours is equally important in leading a balanced life. However, social groups and potential social activities may be limited. This means you need qualities of self-sufficiency, independence and flexibility to remain happy.

---

1. SAusIMM, C/O The University of Queensland, St Lucia Qld 4067.  
E-mail: s354420@student.uq.edu.au

## Suitability to the industry

Mining operations are labour intensive and professionals need the ability to work effectively with operators. When completing vacation work, there can be opportunities to work with operators, however it must be remembered that the student is not in a supervisory role so the relationship can be different when employed as a qualified mining professional.

For any mining professional, the manner in which you present yourself to the workforce is very important. This is often a reflection of your personality. To enjoy a successful career in the industry requires a certain attitude and personality. A list of qualities would include confidence, independence and motivation. The mining industry is well-established, and many employees have well defined views on the nature and environment of the work force. Until recently, the majority of employees of a mining operation were male and female employees were concentrated in administrative roles. However, the prejudices and misconceptions that may have existed towards women in the mining industry are changing, and females now work in both professional and operational roles. Females particularly need confidence to overcome any negative opinions and unusual conditions they may encounter and to retain the ability to work with all employees.

## Management attitudes

The attitudes of management can be crucial to the success of a female employee, and overcoming the influence of more senior staff members can be difficult. Attitudes and opinions can be passed from management to other members of the workforce. Opportunities for promotion can often be hindered without justification.

## PHYSICAL TASKS AND WORKING ENVIRONMENT

There are work tasks that females generally find more difficult to complete, due to physiological differences to males. Of course this depends on the individual's strength and fitness. Physical tasks can be a major component of work for a vacation student and graduate, and to a much lesser extent for professionals. However, to set achievable production goals and have the ability to work effectively with operators, mining professionals need to have an appreciation of the working conditions within the mine. This means having an understanding of the mine's working environment, availability of equipment, the relationship of various tasks within the whole mining operation and associated potential scheduling problems, and problems associated with

each task. This can be achieved by working with crews. As well as gaining experience in the operation of heavy equipment, it is equally important to work with blast crews, service crews and maintenance crews who have more physically demanding roles.

To achieve independence and credibility in the eyes of employees, and have the ability to complete everyday work, a female employee needs a sound level of overall fitness in the tasks required. This includes the ability to carry heavy objects and work both outside, underground and in confined spaces often in hot conditions for extended periods of time. This has more relevance for those working in physical environments such as processing plants and underground. For instance, taking samples and carrying them through the processing plant, using high-pressure hoses, carrying bags of ANFO, opening vent doors, etc are assumed to be routine work and require some degree of physical fitness and strength. These tasks are particularly relevant to professional roles such as processing engineers and ventilation engineers. Provided manual tasks conform to the occupational health and safety standards of the mine, anyone should be capable of doing the job. Although tasks within the industry are being automated, the industry will essentially remain labour orientated as there will always be manual tasks, such as those described.

In direct contrast most equipment in operational roles is now driven from inside an air-conditioned cabin. Females may have a softer manner and better approach when driving equipment, which is desirable to extend the operating life of equipment.

## CONCLUSIONS

I question whether an individual should be accommodated within the workforce irrespective of whether they are able to satisfactorily complete a task. Work as a mining professional should be available to anyone with the ability to do the job. It is not important to be concerned with the number of females working in the industry, and to compare participation rates with other industries across Australia. Rather, educating potential employees of the mining industry should be emphasised.

It is useful to view statistics to identify the composition of the workforce. When viewing figures for female to male employment ratios, it is apparent that the mining industry is not balanced.

A target quota for the number of females working in the industry should not exist. There must be information available, through summer schools, field trips, mentor programs, and associations with industry and education facilities to provide information about the opportunities in the mining industry and the mining culture. There is no way to make the industry more attractive to any individual, only make it accessible.

It is important to advertise the opportunities available to females, and to provide opportunities to experience the conditions of mining operations. However, promotional brochures for the industry and for individual companies often have pictures of female employees. Whilst this promotes women working in the industry and recognises that females are part of the mining workforce, it does not correctly portray the limited numbers of females currently working.

For many high school and university students their perspective of the mining industry is based upon limited practical experience and may be influenced by images created by the media. This creates the problem that however realistic their perception, it is from this view that students base their decision of whether or not to enter the industry.

Females pursue a career in the mining industry for the same general reasons that males do. The opportunity to work in the industry should be open to any individual with the ability to complete the requirements of the job – there is just a greater challenge to be successful when entering a non-traditional area. With occupational health and safety guidelines and the development of equipment operating controls, no job in the mining industry should exclude women. With continued promotion and education of the industry, more females will become aware of the opportunities available to them. However, working and living in a mining environment on a long-term basis will remain attractive only to those with a certain personality and attitude. Female participation rates in the Australian mining industry are a reflection of both limited opportunities for practical experience and suitability to the mining environment.

## ACKNOWLEDGEMENTS

I wish to thank the following people for their assistance: S Leveritt, Professor B White, A Tucker, K E Yamaguchi, R G Wynn, S Petersen and Associate Professor A D S Gillies.