

Working Safely While Technically Monitoring

Introduction

Water well construction sites are busy places where men, equipment and materials are in near-constant movement, where communication is sometimes limited, and where accidents can and do happen. Each crewman usually knows where other crew members are on the site and what they are doing. As they work, they focus upon the respective task(s) and in doing so may overlook others, such as hydrogeologists, engineers, and site visitors who are inspecting, observing, and attending to their own business. Therein lays the problem and the potential for accidents.

This memorandum is written as a gentle reminder and cautionary note to technical professionals who work or visit well drilling sites in hopes that having read it they will then exercise caution and consider that they can be injured if not careful. Having spent 30+ years working on well drilling and construction sites (without accident) the author personally witnessed countless others as they put themselves in harm's way, seemingly expecting that others would watch out for them. It is hoped that this memorandum, if taken seriously, might spare someone from injury.

The Workplace

From the perimeter, well drilling sites look relatively benign, simple and undistinguished. In their simplest form they include the drilling rig, the circulatory system for drilling fluids (if used), storage tanks, storage area(s), and perhaps a "dog house" (i.e., office). Other equipment may consist of a backhoe, delivery vehicles, and a flatbed trailer for drill pipe. The focal point of activity during drilling is the rig "floor" or rotary table where the driller and one or more crewmen work. Diesel engine noise is constant, loud, and droning; it drowns out verbal communication and makes visual awareness very important. The cacophony of sounds can be overwhelming and easily masks the dangers at a site.

Crewmen are schooled in site safety and understand the dangers of their profession. They know that there are occasional site visitors including hydrogeologists, engineers, technicians, and interested and vested parties, who often walk onto a construction site unprepared to avoid risk of injury. Crewmen, attending to their business, can be distracted and are not always aware of the whereabouts of all people on the site.

The "Newly-Minted" Professional

Hydrogeologists, engineers, chemists, and other professionals and technicians are at some point in their respective careers "newly minted". In other words, they are new to their professions. Few have seen, much less visited, a water well construction site. They know what is done, in general terms, but some do not fully understand that the responsibility for their safety while on the site is shared between them and the crew. Site safety is not a common academic course so the newly minted professional has no introduction to the dangers that he or she faces on a construction site.

The new professional typically arrives at the site eager to gather the data that he or she needs and to observe the work in progress. In the case of the geologist or hydrogeologist, that might consist of collecting samples from the circulatory system, logging the samples,

discussing the on-going activities with the crew, and taking photographs for the project file. These simple activities require maneuvering around the site in close proximity to the equipment. In so doing, they may walk into areas around the site where their safety is needlessly compromised.

It goes without saying that everyone wants to be taken seriously. No one wants to admit that they are new to their profession and uninitiated. The workplace is a dangerous environment where heavy equipment is operating, backhoes are moving, noise is ever-present, and people must look out for themselves at all times. First-time visitors would be well served if they were to introduce themselves to the driller and/or foreman, request an explanation of the workplace, and receive a primer on site safety. The reality is that most, if not all first-time visitors, simply walk onto the site and avoid any discussion of their lack of experience. The driller and crew are left to conclude that the person is experienced and will go on about their business.

Safety Equipment

Here in the U.S., we have well-established safety guidelines and regulations put in place to protect workers. These regulations are promulgated to ensure safety in the workplace by mandating safe operation of equipment and appropriate personal protective equipment (PPE) based on the level of exposure. For the typical water well drilling site, visitors and professionals would be well served to use basic PPE such as a hard hat (mandatory), safety shoes (recommended), safety glasses (recommended), and a reflective vest (recommended).

Summary

It is easy to overlook the importance of site safety unless it is made a priority. Contractors understand that site safety is vital and many of them have stringent safety procedures. Working professionals should be aware of their surroundings in the workplace, take all precautions to protect themselves, and invest the time to incorporate safe procedures into their daily activities. The adage of “an ounce of protection is worth a pound of cure” has real merit and meaning.

About the Author

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