SAFETY AND THE WATERWAY PROTECTION TUNNEL

Safety is our number one concern on all MSD projects and with a complex project like the Waterway Protection Tunnel, there are some common safety issues and some safety issues that are unique to a tunnel project. RW Carpenter, who is in charge of safety on the Waterway Protection Tunnel project, shared three key safety issues that typically come up on a large-scale tunnel project.

Three Common Safety Issues:

1. Using the rigging with the right load capacity:
   Our loads are going down more than 200 feet to the base of the tunnel, so it’s important to make sure the team is well trained on using the correct rigging for each load type. For example, we have rigging that’s rated for a 5,000 lb load and rigging that is rated for a 20,000 lb load. Using the right rigging for the size of the load is a key safety issue.

2. Air Quality Monitoring:
   When working in a tunnel with large equipment, you must monitor the air. To monitor atmospheric condition within a below ground space, each crew has an air quality safety monitor with both a visual and auditory alarm that will alert them if the air quality isn’t what it should be. The monitors give the team plenty of warning, so they can alleviate any problems or safely exit the tunnel.

3. Stay Hydrated:
   Another safety concern is dehydration. It’s easy for members of the crew to get so focused on their job that they forget to keep hydrated. Not drinking enough water can be especially challenging on hot days. The job site will include plenty of drinking water and reminders from RW.
The project team has daily safety briefings that are held at the beginning of each shift to promote job site safety and remind crews of potential hazards that may be encountered during their shift. RW is also on the lookout for any issues that might arise throughout his day, like paying attention to how equipment and materials are moving around the job site. All the machinery is equipped with backup alarms, and the team uses flaggers to help ensure a clear pathway for moving equipment. If an alarm malfunctions, they have mechanics on-site who can fix them quickly and get the machine back to work. We’re lucky to have RW and the whole MSD team dedicated to making our job sites safe places to work.

**OPERATING THE GIANT WATERWAY PROTECTION TUNNEL CRANE**

Sean Quimby shows up for work to operate one of the largest cranes in Louisville, while working on the Waterway Protection Tunnel. Sean spends his days maneuvering the crane to move groups of workers, machines, and materials into and out of a tunnel shaft that’s 200 feet below ground. Everything that goes into the tunnel must come out. Sean explains, “We pick up drills, cutter heads, front-end loaders, and 22,000-pound buckets of concrete.”

Sean started his career working in mines but got into the crane operating business four years ago because his uncle was a crane operator. He says it was a little scary in the beginning because it’s a lot of responsibility. Sean got his training at the Crane Institute in Miami, Florida and takes safety very seriously. According to Sean, “There’s no such thing as a short cut in this business, safety is too important.” The most challenging part of his job is lifting the workers into and out of the tunnel. To help ensure everything goes smoothly, he relies on Alfredo Molina who he calls “my right-hand man.” Alfredo, who goes by the nickname “Tito” is Sean’s second set of eyes as they are lowering things in and out of the tunnel and can quickly get him feedback to ensure things go smoothly and safely.

Sean works a maximum of 12 hours per shift and says he likes the variety of the work and the fact that he gets to travel around the country working at different tunnel sites. The hard part is being away from his family so he tries to get home for a visit at least every two weeks. So far, he has worked in Atlanta, Las Vegas, Miami, and Puerto Rico where he had his first tunnel job. You can see pictures of Sean Quimby, our crane operator and his right-hand man Tito in the pictures to the right. If you’d like to learn more about cranes, you can check out the following links.

**HISTORY OF CRANES, NEW WORLD ENCYCLOPEDIA:**

**HOW TOWER CRANES WORK**
[science.howstuffworks.com/transport/engines-equipment/tower-crane4.htm](science.howstuffworks.com/transport/engines-equipment/tower-crane4.htm)

**DID YOU KNOW?**

Cranes are an important part of many construction projects and were first used by the Ancient Greeks in the construction of tall buildings. Unlike modern cranes that are typically powered by internal combustion engines, electric motors, and hydraulics, the Greeks used humans or sometimes donkeys or other animals to power their cranes.