A Day in the Life...

KBR Oxygen Plant Provides Valuable Service to Combat Support Hospital

We Deliver Oxygen

By: Kat Wimmer, Media Relations

Oxygen Technician John McCullough demonstrates the inner workings of the OGSI Oxygen Generator.

John McCullough knows oxygen. He spent 15 years as a commercial diver and is a trained Diving Emergency Medical Technician and a hyperbaric chamber operator. Though he initially came to Iraq to work as a labor foreman for the incinerator group, his current job at the KBR- operated oxygen plant at Camp Liberty suits his skill set perfectly.

McCullough, Incinerator Manager Ray Levine, and I meet up to tour the plant which opened on July 20, 2005. The plant, the only one of its kind so far in Iraq, supplies oxygen to the Combat Support Hospital (CSH) for use during and after operations. The CSH uses between 70 and 80 bottles a day.

The oxygen for the CSH was initially supplied by a local vendor, but delivery was not always guaranteed. Since oxygen is not optional during many of the medical procedures performed at the CSH, the Army tasked KBR with building and running an oxygen plant.

Extreme daytime temperatures mandate that the oxygen-producing machines are run mainly at night. The oxygen plant is staffed by three expatriates and two third country nationals who constantly monitor machines and test the quality of oxygen being produced.

"The client is ecstatic that they now have a steady supply of oxygen," McCullough said. "The oxygen plant was certified by the machine's factory representative and the employees were trained by him as well. We are all able to produce high quality oxygen for use in the CSH."

The plant is noisy and the oxygen-producing machine dominates the center of the room. The machine is an OGSI Oxygen Generator which requires fewer than 600 watts of electrical power to control its operation. The machine separates oxygen from air it collects. It removes the nitrogen from the air and returns it to the atmosphere through a waste gas muffler. The separation process employs a technology called Pressure Swing Adsorption (PSA), the main component of which is a molecular sieve. The sieve absorbs nitrogen more readily than oxygen and when it is saturated, it releases the nitrogen. The oxygen then continues its way through several processes until it is fed into steel tanks. The tanks are then delivered to the CSH.

"This is a one stop shop. We can check and certify bottles, clean bottles, purge gas, remove valves from tanks and repair them," McCullough said.

"We're just happy we can provide the client with high quality service and high quality oxygen," Levine said. "It's an important service and we're proud of the work we do."

Oxygen tanks ready for delivery to the Combat Support Hospital.