



the OUTRIGGER

September 2012

R. Baker & Son Magazine

Service-Disabled Veteran-Owned Small Business (SDVOSB)

R. BAKER & SON Factoring in the Complexities of Plant Consolidation

There are a variety of reasons for a recent trend in plant consolidation projects – mergers and acquisitions, a slow economy, manufacturing relocation, etc. Firms are downscaling large corporate campuses, centralizing operations, and tearing down underused and vacant buildings. The multi-layered logistical challenges posed by these projects require first-rate, highly-experienced rigging, dismantling and demolition contractors.

The complexities of a large consolidation project are numerous, leaving no room for error. Contractors must provide a broad repertoire services – selective and total demolition, environmental remediation and decontamination, precision disassembly, relocation, and reassembly of equipment, and more – all while keeping the client's facility running with minimal or no interruption.

Older buildings contain various substances such as lead paint and asbestos that require safe removal and abatement. Tanks, vessels, ducts, and piping must be cleaned and decontaminated. Concrete and metal are recycled, equipment assets are recovered and sold, and architectural artifacts are salvaged for reuse.

Oftentimes, relocation of specific administrative, laboratory, and manufacturing processes overlap and must be staggered for continuity of facility operation, leaving no room for error. Meticulous planning and coordination is required to ensure that relocated equipment is assembled, tested, started up and commissioned on schedule.

R. Baker & Son has been expertly conducting complex plant consolidation projects since 1935. Contact Art Sferlazzo at 732-222-3443 to discuss your project.



inside this issue...

r. baker & son complexities of plant consolidation
containing contamination from the past - demolition of the pyramids
health & safety: lasers - project profile: yankee rowe atomic

Containing *Contamination* From The Past

Among the many details examined in the planning stages of any demolition, dismantling, or decommissioning project is the identification of the various materials, chemicals and substances that are present, and determining the proper method of disposal, recovery or remediation.

Contractors must work closely with clients, particularly EHS personnel, to map out which substances and materials may be encountered, and where. Equipment and mechanical systems slated for dismantling may contain refrigerants, hydraulic fluid, and glycols that must be reclaimed. Ductwork and exhaust systems must be properly cleaned and decontaminated of accumulated substances and debris, pipes must be flushed, and insulation and surface materials must be identified and properly removed. On relocation projects, DOT regulations require that certain fluids be removed from equipment before transport.

Contractors must always expect the unexpected, particularly when working at an older facility. Old storage tanks may contain any variety of substance that must be tested and identified before it can be handled. Equipment and machinery that was taken down years before is often found to still contain oil or other fluids, or even old product. As more and more aged facilities are closing down, safe recovery and disposition procedures are more important than ever. Please contact David Baker for more information.



Demolition of...the Pyramids?

The construction of the Pyramids of Egypt is widely considered to be one of the most incredible feats in human history. But have you ever heard about the attempted demolition of the pyramids? It wasn't quite as successful, to say the least.

At the end of the 12th century, an Egyptian sultan named al-Aziz Othman decided to dismantle the Pyramids of Giza, beginning with Menkaure, the smallest of the three. For eight months, workers toiled using wedges and levers to move the stones and ropes to pull them down. But when the stones fell, they would bury themselves into the sand, requiring extraordinary efforts to free them. The work was excruciatingly difficult and slow, and the workers were unable to move more than one or two stones a day. Finally realizing the pyramids were far more difficult to destroy than to build, the frustrated sultan abandoned the project, succeeding only in leaving a large gash in the north face of the pyramid, which can still be seen today.



Health & Safety: Lasers

Lasers are widely used in the construction industry for a variety of purposes, most commonly for aligning, leveling, and measuring distances. Though “Caution – Laser In Use” signs are frequently seen on jobsites, many people are unaware of the specific hazards and what precautions should be taken.

Lasers are divided into four risk classifications ranging from harmless to extremely hazardous. The classification system most widely used in the US and accepted by OSHA and ANSI divides lasers into Classes I (safest), II, IIIa, IIIb, and IV (extremely hazardous). The majority of construction laser equipment falls under Class IIIa (3R in a revised system) or lower. Momentary direct contact with a Class IIIa/3R laser beam will generally not cause eye damage, but extended contact must be avoided.

It is important to know the laser classification and take necessary precautions when working with laser equipment. Laser operators must be trained and qualified, and warning signs should be posted in work areas. Avoid using lasers in a way that places the beam near eye level. If this isn't possible, laser safety goggles should be worn. Lasers should always be turned off, capped, or shuttered when left for a period of time. Postpone using lasers where it is raining, snowing, foggy, or in heavy dust areas, which can scatter or deflect radiation. If this isn't possible, take extra precautions to keep personnel well out of laser range.



R.Baker & Son Project Profile: Yankee Rowe Atomic

R. Baker & Son performed the dismantling and removal of the secondary site of Yankee Row, Yankee Atomic's nuclear power station in Rowe, Massachusetts. The strictly regulated and logistically complex project entailed decommissioning of a 185 MW steam turbine generator and its ancillary equipment including a high-pressure turbine rotor and blading, low-pressure turbine rotor, rotating and static exciters, associated transformers, and the generator itself. Yankee Rowe, one of the nation's first commercial nuclear power plants, operated from 1960 to 1992. Decommissioning was completed and approved by the NRC in 2007.

