



the OUTRIGGER

June 2010

R. Baker & Son Magazine
Disabled Veteran Owned and Operated

R. BAKER & SON Clients Expect “Total Care” in Plant and Equipment Relocation

When in the market for a plant relocation contractor, many customers mention “turnkey” service as an important quality to look for.

But nowadays, buyers are advised to beware: “turnkey” has become an overused catchword whose true meaning has been diluted. Plenty of contractors claim to offer turnkey plant relocation services, but how many of them can truly deliver?

As a genuine turnkey contractor, R. Baker & Son offers total care when relocating plants and equipment. With a 100% ready-to-operate result in mind, we use our experience and expertise to anticipate and address every possibility. We ask all the right questions, and, like all good contractors, we know the value of good listening.

The first and foremost consideration in plant relocation is timeframe. Where and when must the new facility be up, commissioned and running? Instead of taking a start-to-finish approach, we target the startup of the new facility and coordinate the project “backward” from there. This helps to eliminate loose ends and makes it easier to identify potential trouble spots before they happen.

Relocation begins with cleaning and decommissioning. Existing utilities and electrical are safely cut and capped. *(cont. on page 2)*



inside this issue...

- r.baker & son “total care” in relocation - industry buzz: not so boring
- r.baker & son dismantles cooling towers - quality award winner
- osha quick card - crane safety

R. Baker & Son Dismantles Cooling Towers

R. Baker & Son recently completed the dismantlement of two 60-foot cooling towers at an active pharmaceutical plant in New Jersey. This challenging project entailed removal of the towers while preserving the towers' concrete dike slab, which was to be reused in constructing new towers.

The towers were situated on a busy plant road with pedestrian and vehicular traffic and were surrounded by live power lines and occupied buildings, so maintaining a safe work site was paramount.

A daily Job Safety Analysis was implemented, workers received detailed safety instructions, and use of required personal protective equipment was strictly enforced. The work area was surrounded with chain link fencing, and debris netting was erected in strategic locations. All utilities and active lines were isolated and secured, and asbestos materials were carefully removed and abated.

Dismantling began with the removal of the cooling tower fans using a Grove hydraulic 100-ton capacity all-terrain crane. Piping and diffusers were then removed from the interior of the towers' dikes, and the material was segregated for clean-up and recycling. Because of the confined work area, mechanical demolition excavators could not be used. Instead, the crane was used to rig 60- and 80-foot Genie man lifts into the dike area, and skilled workers used hand tools to take down the wooden towers, section by section, until the bases of the units were reached.

The 100-ton crane was put to work once again to lift two Bobcat 341 mini-excavators with concrete breakers and buckets into place. Equipment operators expertly reduced the concrete and steel bases to rubble without damaging the slab below. Finally, debris was loaded out of the diked area for off-site recycling. Because of R. Baker & Son's preplanning, safety implementation and skilled workmanship, the project was completed safely and on-schedule.



Clients Expect "Total Care" in Plant and Equipment Relocation

(cont. from page 1)

Refrigerants, oils and liquids are recovered and reclaimed. Lead and asbestos is tested, contained, and addressed appropriately. Contaminated soil is properly removed and replaced. Travel logistics are reviewed and coordinated with exacting detail and all necessary permits are obtained. Decommissioning must occur in a precise sequence, so the same technical knowledge that went into assembling the original plant is needed to systematically take it apart and relocate it. Certain systems, like HVAC and process cooling, are often required to remain up and running while other equipment is removed. O&M manuals and drawings are packed and shipped with the equipment to aid installation at the new location.

With the capability to offer true turnkey plant relocation to anywhere in the world, R. Baker & Son exemplifies a total-care contractor. If you are considering plant or equipment relocation, please contact Art Sferlazzo to discuss what we can do for you.



Congratulations to R. Baker & Son's most recent Quality Award winner: **MIKE MASUCCI JR.**

The Baker Best would like to welcome **Mr. Robert Pena**. Robert is an accomplished Civil Engineer, has over 18+ years of related experience in our Industry. Robert will be working closely with our clients as a Project Manager/Estimator.

INDUSTRY BUZZ: Not So BORING

This giant contraption is called a tunnel boring machine, or TBM. It is used to excavate tunnels up to 16 meters in diameter. TBMs excavate rock and soil using tungsten teeth mounted in a cutter head. Propel rams hold the auger against the chalk face while huge grippers push against the walls to secure the TBM in place. Excavated material is carried by conveyer belt through the back of the TBM for removal from the tunnel. These machines can span the length of two football fields, and the largest TBM cutter head in use measures 15.43 meters in diameter. Eleven TBMs were used to dig the famed "Chunnel", and one is currently being used to bore a hydroelectric tunnel beneath Niagara Falls.



OSHA QUICK CARD

CRANE SAFETY-

Fatalities and serious injuries can occur if cranes are not inspected and used properly. Many fatalities can occur when the crane boom, load line or load contacts power lines and shorts electricity to ground. Other incidents happen when workers are struck by the load, are caught inside the swing radius or fail to assemble/disassemble the crane properly.

- ◆ Cranes are to be operated only by qualified and trained personnel.
- ◆ A designated competent person must inspect the crane and all crane controls before use.

- ◆ Be sure the crane is on a firm/stable surface and level.

- ◆ During assembly/disassembly do not unlock or remove pins unless sections are blocked and secure (stable).

- ◆ Fully extend outriggers and barricade accessible areas inside the crane's swing radius.

- ◆ Watch for overhead electric power lines and maintain at least a 10-foot safe working clearance from the lines.

- ◆ Inspect all rigging prior to use; do not wrap hoist lines around the load.

- ◆ Be sure to use the correct load

chart for the crane's current configuration and setup, the load weight and lift path.

- ◆ Do not exceed the load chart capacity while making lifts.

- ◆ Raise load a few inches, hold, verify capacity/balance, and test brake system before delivering load.

- ◆ Do not move loads over workers.

- ◆ Be sure to follow signals and manufacturer instructions while operating cranes.

For more complete information, visit <http://www.osha.gov>, or call 1-800-321-OSHA