



SPED Newsletter

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Industry Expert Recommends Immediate Pipe Support Assessment

Reid P. McNally, President of PipingSolutions, Inc. and past president of SPED, recommends immediate assessment of piping supports in existing process plants. "Pipe supports may not have been properly installed or have been damaged or corroded during service," he said. "They might be close to failure or, in some cases, have already failed or ceased to work as designed." Piping Solutions, Inc., performs pipe support assessments and other piping engineering services.

Figure 1 shows pipe supports that have failed in service. Figure 2 shows supports that have questionable load capacity. Figure 3 shows supports that have high levels of corrosion.

The recommended Pipe Support Assessment consists of three major phases:

- 1 Field Data Collection
 - Locate all pipe supports and note the

location of each on plan & elevation drawings.

- Make visual inspection of pipe supports, t-shoes, rollers, low friction slide bearings, insulated supports, rigid pipe hangers, sway braces, sway struts, hydraulic snubbers, variable spring hangers and constant spring hangers.
- Record all appropriate data for each pipe support and generate a written record of all relevant data. For spring hangers & supports, the data will include the operating load, the installed load, the spring rate, the actual hot load and cold load positions and the design hot load and cold load positions.
- Take a digital photograph of each pipe support documenting any observed problems.
- Generate a spreadsheet listing all noted pipe supports and preliminary findings.

2 Engineering Assessment

- Organize field collected data and photographs by pipe support.
- Review the collected data for each pipe support and prepare comments as to the suitability for continued service as



Figure 1 Failed Supports



Figure 2 Supports with Questionable Load Capacity



Figure 3 Corroded Supports

follows:

- Acceptable for continued service as is
- Acceptable for continued service with modification or re-conditioning
- Acceptable for continued service with adjustment
- Unacceptable for continued service as is
- Replace with a new or different pipe support
- Review of piping stress analysis originally performed
- Perform a piping stress analysis study to quantify the need for the support

- Provide specifications for all supports other than those that are acceptable for continued use.
 - Provide marked-up plan & elevation drawings identifying all support locations or, using AutoCAD, generate new plan and elevation drawings documenting all support locations.
- 3 Field Supervision
- Removal, adjustment or replacement of rigid pipe supports, spring hangers/supports, sway braces, sway struts and hydraulic snubbers.
 - Field verification of piping movements as well as installed and operating loads carried by spring hangers.

Mr. McNally advises that plant continue to inspect their piping and supports as part of their on-going maintenance program.

For more information, contact: PipingSolutions, Inc., 6219 Brittmoores Road, Houston, Texas 77041-5114 U.S.A., Telephone: (713) 849-3366, FAX: (713) 849-3654, E-Mail: info@pipingsolutions.com, Website: <http://www.pipingsolutions.com>

SPED to Offer Additional PDS II Class in May

By popular demand, SPED will offer an additional section of its popular PDS II class in May. The course dates are May 13-Jul 3, Tues. & Thurs, 6-9 pm. PDS II requires the PDS I class or equivalent as a prerequisite. PDS courses are taught at the SPED PDS Lab hosted by the University of Houston, Downtown.

SPED Course Director Nan Bentz said that unusual demand from continuing classes prompted the extra class. The PDS II class is the second in a series of SPED courses teaching the popular Intergraph Plant Design System CAD environment. Three courses are offered spanning the design package.

For course schedule and enrollment information, contact Nan Bentz at (713) 661-6578.

Halliburton Gets Iraqi Contract

KBR has been awarded a contract from the US Army Corps of Engineers to put into action a contingency plan the company originally developed at the Department of Defense's (DoD) request for assessing and extinguishing oil well fires in Iraq and evaluating and repairing, as directed by the US government, the country's petroleum infrastructure. KBR is the engineering and construction subsidiary of Halliburton (NYSE:HAL).

KBR was selected for this award based on the fact that KBR is the only contractor that could commence implementing the complex contingency plan on extremely short notice. This contract will be used for an interim period, until the US Army Corps of Engineers procures additional contracts support full execution of the contingency plan. KBR is leveraging the expertise of personnel from Halliburton's Energy Services Group for oil well services and engineering planning efforts. KBR hired subcontractors Boots & Coots International Well Control Inc. and Wild Well Control Inc., both also from Houston, to handle the firefighting work.

The State Department US Agency for International Development sent a detailed "request for proposals" to a handful of companies for construction work that could total up to \$600 million over 21 months. The construction contract is one of eight solicitations for work in postwar Iraq. Agency officials said they were prohibited by law from identifying the invited firms, but The Wall Street Journal said they included KBR (Kellogg Brown & Root), the Halliburton subsidiary; Bechtel Group Inc.; Parsons Corp.; Louis Berger Group and Fluor Corp., two companies that have joined together for this effort, and Washington Group International. Sources:

http://biz.yahoo.com/ap/030402/war_halliburton_iraq_2.html

http://www.halliburton.com/news/archive/2003/kbrnws_032403.jsp

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About SPED

The Society of Piping Engineers and Designers (SPED) is only professional organization devoted exclusively to the betterment of Plant Design Professionals. It advances the profession through publications, training and other professional development activities.

This publication is mailed free of charge to all SPED members. Annual individual membership dues are \$35 for professionals, and \$20 for full time students. Corporate memberships for companies with fewer than 75 employees are \$300 per year (includes 3 individual memberships). Corporate memberships for companies with 75 or more employees are \$500 per year (includes eight individual memberships).

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