



eBrief

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GPA Convention online registration deadline

April 13 - 16, 2014 - Dallas, Texas

Mobilizing Midstream: A Global Connection

Online registration deadline

We're less than 4 weeks from the GPA Convention, and more than 2,000 midstream professionals have registered. We will close online registration at 5 p.m. on Friday, April 4. Those not able to register by this date must register on site.

Interested in seeing who's registered? Visit this link: <https://gpaconvention.org/2014-attendees>

For those who have already registered, please keep an eye on your inbox for important GPA Convention e-mails, which we'll be sending soon.

Visit www.GPAGlobal.org for all convention information.

GPA workgroup responds to OSHA request for information

A workgroup of the GPA Safety Committee provided comments to the U.S Department of Labor's Occupational Safety and Health Administration (OSHA) published request for information (RFI) related to potential revisions to its Process Safety Management (PSM) standard and its Explosives and Blasting Agents standard, potential updates to its Flammable Liquids standard and Spray Finishing standard, and potential changes to PSM enforcement policies. In this RFI, OSHA asks for information and data on specific rulemaking and policy options and the workplace hazards they address. The Dec. 9, 2013, request was in response to Executive Order 13650.

Thanks to everyone on the team for their time and effort in drafting these responses:

Mark Prewitt, Chair
Michael Argenti
Curtis Ewers

DGP Midstream
Targa Resources
EnLink Midstream

Jeremy George	Devon Energy Corp.
Bruce Gillick	MarkWest Energy Partners
Jim Hanson	EnCana
Herb Harless	EnLink Midstream
Stephen Heibel	Energy Transfer
Brook Mullen	MarkWest Energy Partners
Mary Nelson	Devon
Steve Potts	Williams

If interested in viewing GPA's comments, contact Johnny Dreyer: jdreyer@GPAglobal.org.

GPA joins others in support of elimination of exemptions from Oklahoma's One Call Program

During the 2013 session, the Oklahoma Legislature formed a task force to produce a report with findings and suggestions for future legislative consideration. During the task force meetings, various stakeholders strongly encouraged the task force to support the elimination of all exemptions to Oklahoma's One Call Program.

Railroads, Oklahoma state agencies, municipal governments, and certain farm and ranch activities are exempt from the One Call Program. Sadly, these exemptions contribute to underground utilities incidents, including oil and gas pipeline incidents, which threaten the safety and welfare of all Oklahomans, especially for the safety of the workers who are excavating without the protection of knowing what is below the ground before they dig, and especially to anyone in harm's way when an easily preventable tragic accident occurs.

The task force recently produced a preliminary report, but it was not approved with a unanimous vote. The report is controversial because it includes a long list of activities that would be exempt from the One Call Program. This report includes language that has been changed from current law, but the net effect is the same: those entities that previously were exempt from the One Call Program would remain exempt if this language is adopted into law. GPA's position is that every exemption creates a risk to public safety, and most exemptions that have been included on the list have a high potential to lead to future accidents with high consequences.

Damage from digging remains the largest contributor toward underground utilities accidents, including pipelines carrying combustible gases and liquids. Since 1986, 144 pipeline accidents have occurred in Oklahoma from excavation projects, according to data from the United States Department of Transportation's Pipeline and Hazardous Materials Safety Administration. Those accidents resulted in eight deaths and 10 injuries.

Continuation of exemptions will place unsuspecting Oklahomans at serious risk, increase environmental damage, potentially cause federal enforcement of our One Call Program, and increase the likelihood of severe supply disruptions for refining petroleum products and natural gas throughout Oklahoma.

GPA has joined with the Association of Oil Pipelines and American Petroleum Institute, encouraging the elimination of all exemptions to Oklahoma's One Call Program.

2014 GPA School of Gas Chromatography registration is open

GPA will host its School of Gas Chromatography Aug. 4 - 8 at the University of Tulsa (Oklahoma). In its 41st year, this intensive one-week school has proven to be one of the best available worldwide. GPA will take up to 100 students this year, and GPA's Analysis and Test Methods Section (Technical Section B) will manage, direct and conduct the school as in past years.

Registration is open and available on a first-come, first-served basis. Those who register by July 11 will save \$100.

Early Bird Registration (by July 11)

\$650 - GPA / GPSA Members

\$950 - Non-Members

Standard Registration (after July 11)

\$750 - GPA / GPSA Members

\$1,050 - Non-Members

For more information and to register, visit www.GPAGlobal.org/chromo.

GPA Research Reports to become available next week

The following GPA Research Reports will be published and distributed to companies that contribute to the GPA research program next week. For those that do not contribute to the research program, the report will be available for purchase on the GPA web site under Publications: www.GPAGlobal.org

RR-220: Research Project 071 - Solubility of Heavy Hydrocarbons in Loaded Amine Solutions

GPA initiated Project 071 to quantify the effect of acid gas loading on the solubility of heavy hydrocarbons of aqueous amine solutions. The research project examined the influence of acid gas loading (both H₂S and CO₂) on the reduction in solubility of a given hydrocarbon from its value in the unloaded amine solution.

RR-221: Research Project 072 - Distribution of Sulphur Species in 3-Phase Separators

The focus of this research report is to determine the sulfur species equilibrium concentrations in each of the three-phases under typical gas production inlet separator operation conditions in downstream sulfur species removal processes for hydrocarbon gas, hydrocarbon liquid and water. Mutual solubility curves for mercaptans and water, and vapor-liquid-liquid equilibrium properties (phase density and sulfur species partitioning) are of interest for sour natural gas, condensate and water systems.

In this project, phase equilibrium measurements for mixtures including sulfur components were measured with the static analytic method using micro-samplers (ROLSI) for phase sampling. The first step was the development of an adequate gas chromatographic analytic method. On the basis of this test, it was agreed to use the following substances for the experiments: hydrocarbons (methane, *n*-butane, *n*-octane, *n*-butylcyclohexane, and benzene), organic sulfur species (methyl mercaptan, ethyl mercaptan, *iso*-propyl mercaptan, and CS₂), CO₂, H₂S and water.

OSUIT offers new associate in applied science degree of pipeline integrity technology

Oklahoma State University Institute of Technology (OSUIT) has shared a long partnership with GPA and GPSA through the school's natural gas compression program. The midstream industry relies upon the education that students receive in applied learning environments that simulate workplace expectations.

The need for skilled engineering technologists that install, operate, maintain, repair and manage the integrity and security of pipelines is on the rise, and OSUIT has targeted this need by initiating its pipeline integrity program that will enable students to develop the skills necessary to be successful in the pipeline industry. Major topics of study include safety, assessing pipeline damage and risk, corrosion control, design and integrity management.

OSUIT has invited GPA and GPSA to partner with the school on this new program in a similar manner as the support both associations provide to the school's natural gas compression program. This degree program requires financial investment in order to provide classrooms, laboratory spaces and equipment for students to have an authentic learning environment that mirrors field experiences as closely as possible. In addition, scholarships are essential to attract new students and develop an avenue toward graduation.

GPA Vice President of Government Affairs Jeff Applekamp and GPA Director of Technical Services Debbie Beaver recently participated in an OSUIT advisory committee meeting to review curriculum and instructional material, discuss an internship program, meet with students enrolled in the new program and review needs to ensure its success.

GPA has invited OSUIT's Joe Bartlett and Mike Pierce, both with the pipeline integrity program, and Roy Achmire with the school's natural gas compression program, to join us for the GPA Convention in Dallas next month.

Technical Section M benchmarking project meeting

Members of Technical Section M – Operations & Maintenance met with an independent market research contractor to determine ways to identify areas of the midstream business where savings in efficiencies in areas of operations and maintenance practices might be feasible. The group is still working out the details on specific areas of focus to develop surveys to see how GPA and GPSA members perform operational tasks and maintenance practices. The surveys will be used to demonstrate levels of costs associated with the company's operation and maintenance and allow sharing among GPA and GPSA members in an effort to benchmark.

A reminder to GPA committee members

GPA committees are the lifeblood of the association, and we greatly appreciate those who step up to serve on our committees and also appreciate member companies that allow their employees to spend time on GPA projects, not only for the midstream industry but for their own personal development.

One important duty that committee members share is reviewing and responding to ballots in a timely manner. We have several ballots out for Technical Section B and the Technical Committee, and the deadlines to reply are quickly approaching. Please remember to make time to review and respond.

For those interested in joining a committee, the upcoming GPA Convention is a great opportunity to explore committees of interest. Committee meetings are open, and attendees are encouraged to attend those meetings to learn more about how to become involved.

GPA Research requests for proposals

Project 141 - Solubility of Hydrocarbons in Amine Treating Solutions

GPA issued a request for proposal for bids for a research project that would look at the solubility of hydrocarbons in amine treating solutions. Amine treating solutions are commonly used to remove acid gases (H₂S and CO₂) from natural gas streams in order to meet the product specifications. The natural gas stream is typically washed by the amine treating solution in a multi-stage gas-liquid contactor. In the process of absorbing the acid gases from the natural gas, the amine treating solution also tends to absorb a portion of the hydrocarbons present in the feed gas.

Earlier research projects have demonstrated a significant salting-in effect when increasing the molar concentration of the amine in the aqueous solution. GPA hopes to be able to model this behavior with a Setchenow type correlation. The recently completed GPA Project 071 demonstrated a consistent salting-out effect on the solubility of several model hydrocarbons when loading the aqueous amine with H₂S, CO₂, or a mixture of the two.

GPA Project 141 shall extend these solubility measurements for a number of hydrocarbons (aromatics and paraffins) in a variety of amine solutions with a matrix of conditions which lend themselves ultimately to correlation of the results.

The bidding period ends April 1. For more information, contact Debbie Beaver: dbeaver@GPAglobal.org or (918) 493-3872.

Project 143 – Acid Gas Transport Properties Near Critical Phase Envelope

GPA is soliciting proposals from interested parties to measure transport properties of acid gas mixtures at near-critical point conditions. The data will improve the design of acid gas injection systems by better defining mixture behavior over relevant conditions. This project builds on previous work in Project 042 and 082 and RR-141.

Acid gas injection involves compressing the blend of acid gas and hydrocarbons commonly produced during sour gas sweetening. This acid gas blend is compressed to a pressure suitable

for injection into the designated formation. Measuring the transport properties near the critical point of the phase envelope will improve the specification of equipment and operating conditions.

Measuring the transport properties will allow reduction of design margins and thus lower cost of design. Improved knowledge of the transport properties will also improve selection of operating conditions for multi stage compression and cooling for acid gas injection. In some cases current designs will avoid the near critical point area by 30 percent or more in terms of operating temperature and pressure, which substantially adds to required equipment size (HP, vessel weight, and cooler duty) in the design. The new data will enable more reliable designs and operations for both new and existing facilities.

The bidding period ends March 28. For more information, contact Debbie Beaver: dbeaver@GPAglobal.org or (918) 493-3872.

ASTM Natural Gasoline Specification

GPA members from ONEOK, Williams and Marathon have been participating with ASTM D02-SC-A task group, which continues to meet to develop a natural gasoline specification to be used as a blend stock in ethanol fuel blends for flexible-fuel automotive spark-ignition engines (specification D5798). The blends are referred to commercially as Ethanol Flex Fuel blends. This specification also covers natural gasoline to be used as a blend stock in denatured fuel ethanol for blending with gasoline for use as automotive spark ignition engine fuel Specification D4806. This standard is intended to provide a market specification and a regulatory reference for natural gasoline to be blended outside of a refinery. ONEOK has provided the work group with its specifications for denaturant grade natural gasoline.

ASTM Compressed Natural Gas Task Force Meeting

An ASTM D02 task group has been formed to develop a new standard for Compressed Natural Gas (CNG) and Liquefied Natural Gas (LNG) to be used as a motor vehicle fuel (WK40094). The group is focusing on the fuel quality at the point of delivery into the vehicle fuel tank.

The specification will be designed around both the needs of the original equipment manufacturers and the production/distribution system. The starting point is based on dividing natural gas into different categories: LNG, CNG and biomethane not as part of the pipeline. There may be a further division based on energy content of the natural gas fuels found in different non interconnected markets (i.e. North America, Europe, South East Asia, South America, Africa, etc.). Included in the standard will be parameters such as undesirable contaminants that need to be removed from the fuel before delivery into the vehicle.

GPA staff is participating to ensure that “stationary engines” are excluded in the new standard. Contact Debbie Beaver with questions or suggestions: dbeaver@GPAglobal.org or (918) 493-3872.

GPA/GPSA Calendar

March

28 - North Texas GPA Inaugural East Texas Sporting Clays

April

3 - North Texas GPA Rangers Ballpark Luncheon
13-16 - 93rd annual GPA Convention

Gas Processors Association

6526 E. 60th St.
Tulsa, OK 74128
(918) 493-3872

www.GPAglobal.org

GPA@GPAglobal.org

