



ST. LOUIS ENGINEER

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Missouri Society of Professional Engineers (MSPE) and Missouri Water Environment Association (MWEA)

January Joint Luncheon
Thursday, January 16, 2020

NPDES Permitting 101.... and Beyond

Abstract: NPDES Permits are like opinions...everyone has one. This session will focus on providing the audience with a basic, but deep understanding of municipal wastewater permitting. It will show some of the nuances in permitting and what to be aware of as you file your permit application and review your final NPDES Permit. The two presenters, a former Missouri State regulator and an engineer from a leading design/build firm will guide the audience through the intricacies of the State’s rule and regulations that can make the permit process challenging for the utility operators and managers to understand. The presenters will illustrate how and why analytical sample results from past years impact current permit effluent limits. Finally, this session will show the attendees the “numbers” behind the “trade-craft” of NPDES Permit development.

Lacey Hirschvogel is the Environmental and Public Policy Manager with Missouri Public Utility Alliance. She leads the Missouri Public Water Council, a branch of MPUA that focuses on training, education, and planning assistance for municipal water and wastewater utilities. Lacey advocates for MPUA’s members on legislative and regulatory issues. Lacey joined MPUA after working for the Department of Natural Resources’ Water Protection Program as an environmental scientist where she wrote municipal National Pollutant Discharge Elimination System (NPDES) wastewater permits and developed state policy and regulations. She graduated with a Bachelor of Science degree in Chemistry from the University of Florida and a Master of Public Affairs degree at the University of Missouri.

Jeff Barnard, P.E. is the Global Practice Leader at Burns & McDonnell’s St. Louis regional office. He has a strong background in capital improvements planning for wastewater systems, including wastewater needs forecasting; inflow & infiltration studies; system hydraulic modeling; wet weather storage facilities; sewer system evaluation surveys; corrosion evaluation and control; system rehabilitation; and NPDES permitting. Mr. Barnard has specific experience in the design of pump stations, gravity sewers, and treatment plant processes.

Time, Date, Location

11:30am to 1:00pm, January 16, 2020, at the Engineering Center, 4359 Lindell, St. Louis 63018.

Registration starts at 11:30am and lunch is served at 11:45am.

The program will begin promptly at 12:00pm.

One (1) PDH is available.

Cost: \$20/person

Registration : <https://mspe.org/event-3635091>

Please register and pay online using the link above for reservations by 5:00pm, Thursday, January 9th, 2020.

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PE Exam Refresher Course Application.....Attached

P R E S I D E N T ' S M E S S A G E



When discussing our Chapter's award program recently I was reminded of Rudyard Kipling's many heroic celebrations of Engineers, titles such as the *Sappers*, *The Sons of Martha* or even his *Ritual Calling of an Engineer*. So this month I thought I might cheat a little and complete my

letter by sharing one of my favorite Kipling poems, *Hymn of the Breaking Strain* (1935).

THE careful text-books measure
(Let all who build beware!)
The load, the shock, the pressure
Material can bear.

So, when the buckled girder
Lets down the grinding span,
'The blame of loss, or murder,
Is laid upon the man.
Not on the Stuff - the Man!

But in our daily dealing
With stone and steel, we find

The Gods have no such feeling
Of justice toward mankind.
To no set gauge they make us-
For no laid course prepare-
And presently o'ertake us
With loads we cannot bear:
Too merciless to bear.

The prudent text-books give it
In tables at the end
'The stress that shears a rivet
Or makes a tie-bar bend-
'What traffic wrecks macadam-
What concrete should endure-
but we, poor Sons of Adam
Have no such literature,
To warn us or make sure!

We hold all Earth to plunder -
All Time and Space as well-
Too wonder-stale to wonder
At each new miracle;
Till, in the mid-illusion
Of Godhead 'neath our hand,
Falls multiple confusion
On all we did or planned-
The mighty works we planned.

We only of Creation
(*Oh, luckier bridge and rail*)
Abide the twin damnation-
To fail and know we fail.
Yet we - by which sole token
We know we once were Gods-
Take shame in being broken
However great the odds-
The burden of the Odds.

Oh, veiled and secret Power
Whose paths we seek in vain,
Be with us in our hour
Of overthrow and pain;
That we - by which sure token
We know Thy ways are true -
In spite of being broken,
Because of being broken
May rise and build anew
Stand up and build anew

So do not leave the celebration of Engineering to Kipling, he has passed after all, but take the time to nominate someone deserving for one of our Chapter Awards, details are in the newsletter. Also plan on joining us for our next Chapter Luncheon, January 16th, and our Awards Dinner, February 21st, again details are in the newsletter. Finally if you have any questions about our awards or anything else related to MSPE please email me at mtbuec@stlmsd.com or call 314-768-2772.

For the good of the profession,
Michael T. Buechter, PE, D.WRE, F.EWRI

Missouri Society of Professional Engineers - St. Louis Chapter

2019-2020 Calendar

Dec-19						
S	M	T	W	T	F	S
				5	6	7
1	2	3	4		13	14
8	9	10	11	21	20	21
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Feb-20						
S	M	T	W	T	F	S
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						8
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

Apr-20						
S	M	T	W	T	F	S
						4
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
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26	27	28	29	30		

Jan-20						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Mar-20						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

May-20						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

- Kickoff Meeting Chapter/Foundation Board Meeting
- Chapter/Foundation Board Meeting
- Newsletter Deadline for Article Submittals, President's Message, Program Information, Etc.
- Tentative Program Dates
- 2020 Eweek
- Missouri Engineer Article Deadline Dates

Potential Programs, potential 3rd Thursday of the month:

- December: Christmas light tour (French)
- January: Joint meeting with MWEA, water regulation (Losli)
- January: MSPE sponsors MSD CIRP outreach (Buechter)
- February: 21st - Awards Dinner (Green)
- March: TBD
- April: TBD
- May: Chad Raley Ameren Soalr Facilities (Black, Engleman)





ST. LOUIS CHAPTER
MISSOURI SOCIETY OF
PROFESSIONAL ENGINEERS

69th National Engineers Week Reception and Awards Program

When:

Friday, February 21st, 2020
6:30-8:30 PM

Where:

The Engineering Center
4359 Lindell Blvd

Program:

Networking at 6:30 PM
Dinner at 7:00 PM
Program Begins at 7:30 PM

RSVP at:

<https://mspe.org/event-3644141>

\$50 Per Person

2020 Awards

ENGINEER OF THE YEAR

YOUNG ENGINEER OF THE YEAR

OUTSTANDING PE IN GOVERNMENT

OUTSTANDING PE IN PRIVATE PRACTICE

OUTSTANDING PE IN CONSTRUCTION

OUTSTANDING PE IN INDUSTRY

OUTSTANDING PE IN EDUCATION

QUALIFICATIONS-BASED SELECTION (QBS)

PRIVATE PRACTICE PROFESSIONAL DEVELOPMENT (PPPD)

CALL FOR NOMINATIONS - SOUGHT FOR AWARDS

Please consider nominating a fellow member, colleague, customer or company for one or more of the St. Louis Chapter's Awards this year. The awards will be presented at the annual Engineers Week Awards Banquet. Deadline for submitting nominees and applications is the December 14th, 2019. Nominations should include resume, biographical sketch or completed application form.

A full list of past award winners, award descriptions and specific qualifications is available on the website <http://mspe.org/content.php?page=St. Louis Chapter> under "St. Louis Chapter History".

Questions or nominations should be directed to Awards Committee Chair, Bently Green, at greenb2@bv.com

Engineer of the Year

- PE in Missouri
- Membership in MSPE/NSPE *is not* required

Young Engineer of the Year

- Age 34 or younger as of January 1, 2019
- Membership in MSPE and NSPE *is* required

Outstanding PE In Government

- PE in Missouri
- Membership in MSPE/NSPE *is not* required

Outstanding PE Private Practice

- PE in Missouri
- Membership in MSPE/NSPE *is not* required

Outstanding PE in Construction

- PE in Missouri
- Membership in MSPE/NSPE *is not* required

Outstanding PE in Industry

- PE in Missouri
- Membership in MSPE/NSPE *is not* required

Outstanding Professional Engineer in Education

- PE in Missouri
- Membership in MSPE/NSPE *is not* required

Qualifications-Based Selection (QBS)

- Company award

Private Practice Professional Development (PPPD)

- Company award

Professional Engineer Refresher Course

Course Information

These review courses are geared toward helping participants pass the Professional Engineer (P.E.) license exam. Classes will be held in the fields of:

Civil - *Water Resources, Geotechnical, Transportation, Construction, and Structural.*

Mechanical - *Mechanical Systems/ Materials, Hydraulics & Fluids, Energy & Power Systems, and HVAC/ Refrigeration.*

Electrical - *Power.*

Course fee includes a three-ring binder, lecture notes, certificate of completion, and CEU's.

It is recommended that participants purchase their discipline's desk reference manual *prior* to the first class. Desk reference manuals can be obtained by going to the following website:

<http://ppi2pass.com>

2020 Spring Schedule Registration

Classes are scheduled to meet on the following Saturday mornings from 8:00 am to noon:

- January 25th
- February 1st
- February 8th
- February 15th
- February 22nd
- February 29th
- March 7th

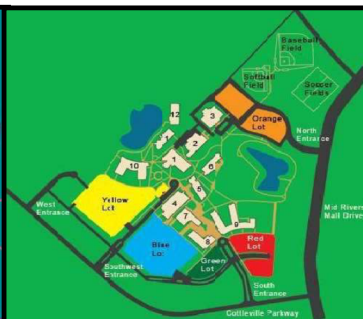
Report to Room 208 of the Humanities Building (HUM) on the campus of St. Charles Community College. Park in the Yellow Lot. *Class dates and times are subject to change.*

Four ways to register:

1. **Online** - to register online, go to: www.stchas.edu/learnforlife
2. **In Person** - Walk into 103 HUM with a completed registration form (form is included at the end of the newsletter) and payment. Registration hours are: between 8:00 a.m. and 5:30 p.m. Monday through Thursday; between 8:30 a.m. and 4:00 p.m. on Fridays; or after-hours drop box in HUM hallway.
3. **By phone** - Call 636-922-8233 during the hours listed above. Telephone registration: VISA, Discover, and MasterCard only accepted as payment.
4. **By Mail** - Complete the registration form at the end of the newsletter, attach your check or money order, and mail to:

SCC, Division of C&CD
4601 Mid Rivers Mall Dr., HUM 103
Cottleville, MO 63376-2865

HOW TO LOCATE THE COLLEGE & CAMPUS BUILDINGS



1. College Center
2. Campus Services
3. Child Development Center
4. Fine Arts Building
5. Humanities Building
6. Technology Building
7. Learning Resource Center—Library
8. Student Center
9. Administration

DEADLINE:

January 23, 2020

Course content and inquiries should be directed to

Lisa Cheng, P.E.

(314) 425-8355 or
lisa.cheng@hdrinc.com

MSPE St. Louis Chapter Scholarship Program

Engineering Scholarships Available to Graduating High School Seniors

The funding for the scholarships described herein is provided by the Missouri Society of Professional Engineers St. Louis Chapter.

This scholarship is provided for graduating high school seniors who have a genuine interest in engineering. Please read the instructions carefully and fulfill all of the requirements. Should you have questions that your parent, guidance counselor or principal cannot answer, **please contact Kathy French, P.E.**, St. Louis Chapter Scholarship Committee Chair at kfrench@LSPower.com or 314-580-2738. The scholarship form is also available from a St. Louis MSPE Chapter officer or by emailing kfrench@LSPower.com.

Eligibility Requirements for St. Louis Chapter Scholarship:

- 1) Be a high school senior
- 2) Be a citizen of the United States at the time of application
- 3) Have at least a 3.0 grade point average (based on a 4.0 scale) for the 10th and 11th grades.
- 4) Have at least a minimum score on the American College Testing Program (ACT) test of 29 in Math and 25 in English.
- 5) Must enroll in an engineering program that has been accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET-EAC) at one of the following state institutions or a Pre-Engineering Program at a Missouri College or University that has a working agreement to transfer credits with one of the named schools listed below.
- 6) Reside in the City of St. Louis or one of the following Counties: Franklin, Jefferson, Lincoln, St. Louis, St. Charles, or Warren

Types of Scholarships

The MSPE St. Louis Chapter will award two Scholarships of \$1,000 each to the highest scoring applicants. These scholarships are awarded to high school seniors preparing to attend one of the following Missouri schools of engineering or a Pre-Engineering Program at a Missouri College or University that has a working agreement to transfer credits with one of the named schools listed below:

College of the Ozarks, Point Lookout, MO
Southeast Missouri State University, Engineering Physics Program (BS), Cape Girardeau, MO
Southwest Missouri State University, Computer Science (BS), Springfield, MO
St. Louis University, Parks College of Engineering & Aviation (AE, EE, ME), St. Louis, MO
Truman State University, Pre-Engineering 2-year Program (University of Missouri System), MO
University of Missouri-Columbia, College of Engineering, Columbia, MO
University of Missouri-Kansas City, School of Engineering, Kansas City, MO
Missouri University of Science and Technology, School of Engineering, Rolla, MO
Missouri University of Science and Technology, Energy, and Earth Resources, Rolla, MO
University of Missouri St. Louis/Washington University Joint Undergraduate Engineering Program
Washington University, School of Engineering and Applied Sciences, St. Louis, MO



Important Save the Dates



SAVE THE DATES

CELEBRATING ENGINEERING WITH NATIONAL ENGINEERS' WEEK

TUESDAY, FEBRUARY 18TH, 2020
LUNCHEON EVENT
CLAYTON PARK PLAZA
7750 CARONDELET AVENUE
CLAYTON, MISSOURI 63105

WEDNESDAY, FEBRUARY 19TH, 2020
DISCOVERY FAIR AT THE ENGINEERING CENTER

FRIDAY, FEBRUARY 21ST, 2020
CAREER FAIR AT THE ENGINEERING CENTER

FOR MORE INFORMATION PLEASE CONTACT
GINA FALVEY AT GINA@ENGINEERSCLUB.NET OR 314.533.9333

ADVERTISEMENT OPPORTUNITY!



Are you looking to advertise your business in the St. Louis area to a focused group of Engineers?

Look no further than the MSPE—St. Louis Engineer Newsletter!

Your company or message will be directly connected to hundreds of Engineers in the Greater St. Louis Area in various companies and industries.

If you are interested, contact Adam Zuroweste at azuroweste@burnsmcd.com

**YOUR
AD
HERE**



Deadline for Registration:

January 23th, 2020

How to Enroll – 4 Ways to Register:

- Online** – To register online, go to www.stchas.edu/learnforlife
- By Mail** – Complete the registration form, attach your check or money order, and mail to:
 SCC, Division of C&CD
 4601 Mid Rivers Mall Dr., HUM 103
 Cottleville, MO 63376-2865
- In Person** – Walk into 103 HUM with completed registration form and payment.
 Registration hours:
 - 8 a.m. – 5:30 p.m. Mon-Thurs.
 - 8:30 a.m. – 4:00 p.m. Fridays
 - After-hours drop box in HUM hallway
- By Phone** – Call 636-922-8233 during the hours listed above. Telephone registration: VISA, Discover, and MasterCard only accepted as payment.

Name: _____

Address: _____

City, State, Zip: _____

E-mail: _____

Date of birth: _____

Home Phone: _____

Work/Cell Phone: _____

Registration Fee:

\$550 for MSPE & SAME members

\$600 for ASCE, ASME, ASHRAE & IEEE members

\$650 for non-members

Circle one (if applicable):

MSPE / SAME / ASCE / ASME / ASHRAE / IEEE Member

Member Number: _____

- Civil Engineering Refresher
- Mechanical Engineering Refresher
- Electrical Engineering Refresher

SCC
 ST. CHARLES COMMUNITY COLLEGE
 Division of Corporate & Community Development
 Humanities Building, Room 103
 4601 Mid Rivers Mall Drive
 Cottleville, MO 63376-2865

Professional Engineer Refresher Course



Presented By

