

MINUTES

December 11, 2018 Well Constructors
Continuing Education Committee Meeting
And Teleconference

Committee Members Present: Joel Jeffery

Committee Members Teleconferencing: Kevin Gill, James (Jim) Mack, Ryan Galbreth

Others Present: Buffy M Gillis (OWRD)

A) Introductions and Acknowledgements:

B) Review of October 11, 2018 Continuing Education Committee Meeting Minutes.

The Cont. Ed Committee reviewed the courses that comprised:

- IGWA CEC Workshop (November 16, 2018 Coeur d'Alene, ID)

RESOURCE ROUND TABLE: Joel Jeffery motioned to assign 1 credit in the General Category. Jim Mack seconded the motion. Motion carried all in favor.

WASHINGTON RULES & REGULATIONS: Jim Mack motioned to assign 0 credits. Kevin Gill seconded the motion. Motion carried all in favor.

WHY SUBMERSIBLE MOTORS FAIL: Jim Mack motioned to assign 0.5 credits in the General Category. Kevin Gill seconded the motion. Motion carried all in favor.

WASHINGTON RULES & REGULATIONS: Jim Mack motioned to assign 0 credits. Kevin Gill seconded the motion. Motion carried all in favor.

SUB DRIVE CONNECT: Jim Mack motioned to assign 0.5 credits in the General Category. Kevin Gill seconded the motion. Motion carried all in favor.

ELECTRONIC LOGGING DEVICES: AN UPDATE: Joel Jeffery motioned to assign 1 credit in the General Category. Joel Jeffery seconded this motion. Motion carried all in favor.

DIGLINE: 811 CALL BEFORE YOU DIG: Joel Jeffery motioned to assign 1 credit in the Safety Category. Jim Mack seconded this motion. Motion carried all in favor.

DIGLINE: NEW RULES & POTENTIAL LAW CHANGES: Joel Jeffery motioned to assign 1 credit in the Safety Category. Kevin Gill seconded this motion. Motion carried all in favor.

REPORT ON LICENSING & LEGISLATION: Kevin Gill motioned to assign 0 credits. Joel Jeffery seconded this motion. Motion carried all in favor.

- NGWA 2018 Groundwater Week (December 3-6, Las Vegas)

WATER WELL DESIGN BY NUMBERS: Kevin Gill motioned to assign 4.5 credits in the General Category. Jim Mack seconded the motion. Motion carried all in favor.

BASIC PUMP SIZING & UNDERSTANDING THE PUMP CURVE: Jim Mack motioned to assign 1 credit in the General Category. Ryan Galbreth seconded the motion. Motion carried all in favor.

BUSINESS EFFICIENCY-ARE WE REALLY IN IT FOR THE MONEY: Joel Jeffery motioned to assign 1 credit in the General Category. Kevin Gill seconded the motion. Motion carried all in favor.

DRILLING REACTIVE CLAYS & SHALES: Kevin Gill motioned to assign 1 credit in the General Category. Jim Mack seconded the motion. Motion carried all in favor.

GETTING PAST THE “FEEL-GOOD” PART OF A GROUNDWATER PROJECT IN THIRD WORLD COUNTRY: Jim Mack motioned to assign 1 credit in the General Category. Joel Jeffery seconded the motion. Motion carried all in favor.

HOW TO CONSERVE WATER USING INNOVATIVE TECHNIQUES WITH TRADITIONAL PROBLEM WATER TREATMENTS: Kevin Gill motioned to assign 1 credit in the General Category. Joel Jeffery seconded the motion. Motion carried all in favor.

THE EMERGING REVOLUTION IN GROUNDWATER RIGHTS: Joel Jeffery motioned to assign 1 credit in the General Category. Kevin Gill seconded the motion. Motion carried all in favor.

ADVANCED CURVES, NPSH_r, AND SIZING PROGRAMS: Kevin Gill motioned to assign 1 credit in the General Category. Jim Mack seconded the motion. Motion carried all in favor.

DON'T FORGET TO DISINFECT, DEVELOPING A STRATEGY FOR MICROBIOLOGICAL CONTAMINATION IN PRIVATE WATER SYSTEMS: Jim Mack motioned to assign 1 credit in the General Category. Joel Jeffery seconded the motion. Motion carried all in favor.

GROUNDWATER INDUSTRY LEGISLATIVE UPDATE & CURRENT ISSUES: Kevin Gill motioned to assign 1 credit in the General Category. Joel Jeffery seconded the motion. Motion carried all in favor.

PHASE CONVERTERS, VFD'S & LOW HARMONICS. WHY SHOULD I CARE? PHASE CONVERTERS, VFD'S & LOW HARMONIC REQUIREMENTS. WHAT DO THEY HAVE IN COMMON AND WHY SHOULD I CARE: Joel Jeffery motioned to assign 0.5 credits in the General Category. Jim Mack seconded the motion. Motion carried all in favor.

TRANSITIONING TO THE 2018 TAX YEAR: HOW WILL IT COMPARE TO 2017:

Jim Mack motioned to assign 1 credit in the general category. Kevin Gill seconded the motion. Motion carried all in favor.

WE MIX PROPERTIES, NOT MUD! Joel Jeffery motioned to assign 1 credit in the General Category. Kevin Gill seconded the motion. Motion carried all in favor.

HOW TO BECOME A GROUNDWATER GARDIAN GREEN SITE: Kevin Gill motioned to assign 1 credit in the General Category. Jim Mack seconded the motion. Motion carried all in favor.

PERFORMING PLUMBNESS & ALIGNMENT TESTS-THE LOST BUT ESSENTIAL ART: Kevin Gill motioned to assign 1 credit in the General Category. Jim Mack seconded the motion. Motion carried all in favor.

PREVENTIVE MAINTENANCE-EXTENDING THE LIFE OF YOUR WATER: Jim Mack motioned to assign 1 credit in the General Category. Kevin Gill seconded the motion. Motion carried all in favor.

SUPPLY CHAIN SURVIVAL IN THE AGE OF AMAZON: Joel Jeffery motioned to assign 1 credit in the General Category. Jim Mack seconded the motion. Motion carried all in favor.

US DEPT OF ENERGY PUMP EFFICIENCY STANDARDS-WHAT YOU NEED TO KNOW: Jim Mack motioned to assign 0.50 credits in the General Category. Joel Jeffery seconded the motion. Motion carried all in favor.

USING DIGITAL METERS ON VFD'S: Kevin Gill motioned to assign 0.5 credits in the General Category. Joel Jeffery seconded the motion. Motion carried all in favor.

CONSTANT PRESSURE SYSTEMS-THE OPPORTUNITY, THE CHALLENGES, THE PLAYBOOK: Jim Mack motioned to assign 0.5 credits in the General Category. Kevin Gill seconded the motion. Motion carried all in favor.

INEXPENSIVE & EFFECTIVE SAFETY RESOURCES ANY COMPANY CAN USE: Joel Jeffery motioned to assign 1 credit in the Safety Category. Kevin Gill seconded the motion. Motion carried all in favor.

LEAVING YOUR BUSINESS ON YOUR TERMS-KNOW YOUR OPTIONS: Kevin Gill motioned to assign 1 credit in the General Category. Jim Mack seconded the motion. Motion carried all in favor.

WATER WELL REHABILITATION AND TIME BASED PREVENTIVE MAINTENANCE: Jim Mack motioned to assign 1 credit in the General Category. Joel Jeffery seconded the motion. Motion carried all in favor.

2018 OSHA CRANE RULE FOR CRANES IN CONSTRUCTION: Joel Jeffery motioned to assign 1 credit in the Safety Category. Kevin Gill seconded the motion. Motion carried all in favor.

BIOFILM PRESENCE IN POTABLE WELLS & EFFECTIVE CHEMICAL TREATMENT STRATEGIES FOR REMOVAL:

Jim Mack motioned to assign 1 credit in the General Category. Kevin Gill seconded the motion. Motion carried all in favor.

NAVIGATING THE 2018 TAX LAWS TO REDUCE UNCERTAINTY AND IMPROVE PROFITABILITY:

Joel Jeffery motioned to assign 1 credit in the General Category. Kevin Gill seconded the motion. Motion carried all in favor.

PROTECTING TODAY'S MORE EFFICIENT PUMP MOTORS FROM PWM

DAMAGE: Jim Mack motioned to assign 0.5 credits in the General Category. Kevin Gill seconded the motion. Motion carried all in favor.

SOLAR POWERED SINGLE PHASE 3-INCH AC PUMPS FOR REPLACING

WINDMILLS: Jim Mack motioned to assign 0.5 credits in the General Category. Joel Jeffery seconded the motion. Motion carried all in favor.

TIER IV ENGINES: Jim Mack motioned to assign 1 credit in the General Category. Kevin Gill seconded the motion. Motion carried all in favor.

AC/SOLAR POWER BLENDING-MAXIMIZE FREE SOLAR POWER WITHOUT COMPROMISING PERFORMANCE:

Jim Mack motioned to assign 0.5 credits in the General Category. Kevin Gill seconded the motion. Motion carried all in favor.

AN INTRODUCTION TO BEHAVIOR BASED SAFETY (BBS): Joel Jeffery motioned to assign 1 credit in the Safety Category. Ryan Galbreth seconded the motion. Motion carried all in favor.

MATERIALS OF CONSTRUCTION AND PUMPS-WHAT TO USE WHEN: Jim Mack motioned to assign 1 credit in the General Category. Joel Jeffery seconded the motion. Motion carried all in favor.

MAXIMIZING EFFICIENCY IN THE DRILLING PROCESS PANEL: Kevin Gill motioned to assign 1 credit in the General Category. Jim Mack seconded the motion. Motion carried all in favor.

REDEFINING WATER TREATMENT TECHNOLOGY SELECTION FOR TODAY'S

WATER QUALITY CHALLENGES: Kevin Gill motioned to assign 1 credit in the General Category. Joel Jeffery seconded the motion. Motion carried all in favor.

SUPPORT SERVICES FOR THE 21ST CENTURY BUSINESS: Kevin Gill motioned to assign 1.5 credits in the General Category. Jim Mack seconded the motion. Motion carried all in favor.

SCIENTIFIC GROUNDWATER TERMINOLOGY YOU MAY NOT FULLY

UNDERSTAND-LETS DISCUSS: Jim Mack motioned to assign 1 credit in the General Category. Joel Jeffery seconded the motion. Motion carried all in favor.

SINGLE PHASE MOTORS AND CONTROL TESTING: Joel Jeffery motioned to assign 0.5 credits in the General Category. Kevin Gill seconded the motion. Motion carried all in favor.

THE ESSENTIALS FOR CONTRACTORS WORKING AT SURFACE MINES: Kevin Gill motioned to assign 1 credit in the General Category. Jim Mack seconded the motion. Motion carried all in favor.

GREEN INFRASTRUCTURE: Joel Jeffery motioned to assign 1 credit in the General Category. Kevin Gill seconded the motion. Motion carried all in favor.

HOW WATER WELL CONTRACTORS CAN BECOME INVINCIBLE TO LAWSUITS AND SAVE THOUSANDS IN TAXES: Kevin Gill motioned to assign 1 credit in the General Category. Ryan Galbreth seconded the motion. Motion carried all in favor.

RADIUM REMOVAL FROM POTABLE WATER SUPPLIES: Joel Jeffery motioned to assign 1 credit in the General Category. Kevin Gill seconded the motion. Motion carried all in favor.

RESOURCES TO ASSIST YOU IN OUTRACH AND EDUCATION TO PRIVATE WELL OWNERS AND OTHER PROFESSIONALS: Jim Mack motioned to assign 1 credit in the General Category. Joel Jeffery seconded the motion. Motion carried all in favor.

UNRAVELING THE CAUSES THE WELL INEFFICIENCIES: Kevin Gill motioned to assign 1 credit in the General Category. Jim Mack seconded the motion. Motion carried all in favor.

DIRECT PUSH TECHNOLOGY: AS USEFUL AS EVER-AND COST EFFECTIVE, TOO: Ryan Galbreth motioned to assign 4 credits in the General Category. Joel Jeffery seconded the motion. Motion carried all in favor.

ADVANCED METHODS FOR MONITORING & SAMPLING IN KARST GROUNDWATER SYSTEMS: Joel Jeffery motioned to assign 2 credits in the General Category. Kevin Gill seconded the motion. Motion carried all in favor.

DIRECT PUSH METHODS FOR GROUNDWATER SAMPLING & MONITORING: Ryan Galbreth motioned to assign 2 credits in the General Category. Joel Jeffery seconded the motion. Motion carried all in favor.

AIRBORNE ELECTROMAGNETIC SURVEYS FOR HYDROGEOLOGIC FRAMEWORKS AND GROUNDWATER MANAGEMENT: Joel Jeffery motioned to assign 3 credits in the General Category. Kevin Gill seconded the motion. Motion carried all in favor.

BOREHOLE GEOPHYSICAL LOGGING FOR WATER RESOURCES/WATER SUPPLY APPLICATIONS: Kevin Gill motioned to assign 4 credits in the General Category. Ryan Galbreth seconded the motion. Motion carried all in favor.

- Preferred Pump & Equipment (December 14, 2018)

INTRODUCTION TO DRILLING FLUIDS: Kevin Gill motioned to assign 5 credits in the General Category. Jim Mack seconded the motion. Motion carried all in favor.

INTRODUCTION TO THE GEOLOGY/HYDROLOGY OF THE CRBG: Kevin Gill motioned to assign 2 credits in the General Category. Ryan Galbreth seconded this motion. Motion carried all in favor.