MINUTES

Well Constructor Continuing Education Committee Tuesday, December 1, 2009

Committee Members Present: Dennis Daugherty, Greg McInnis, Kris Byrd Others Present: Tracy Fox, Juno Pandian

A) Cont. Ed. Committee Meeting Minutes

The draft minutes from the September 24, 2009, meeting were reviewed. Byrd motioned to approve the draft minutes as is, Daugherty seconded. The vote was all in favor.

B) Other Issues

• The Oregon Ground Water Association (OGWA) requested a re-evaluation of two of their classes from the 2009 OGWA Fall Convention held October 23-24, 2009, at Salishan Spa & Golf Resort in Gleneden, Oregon (OR). Each course was assigned 0.5 CEC in the September 24, 2009, meeting. The OGWA provided additional information for "Expanding into Renewable Energy – going green with wind turbines" one (1) hour, October 23, 2009, and "Arsenic: My Customer Has Arsenic – What Are Our Options?" one (1) hour, October 24, 2009. McInnis motioned to add 0.5 CEC for each of these courses, for a total of one (1) CEC per course, Byrd seconded. The vote was all in favor.

C) Review of Applications

The Cont. Ed. Committee reviewed the following course applications as part of the **2009 Ground Water Expo** scheduled for **December 10-13, 2009, in New Orleans, Louisiana (LA)**. The sponsor is the **National Ground Water Association** (NGWA). The courses were reviewed as follows:

- "Determining the Value of Your Business" one hour 30 minutes, December 10, 2009. The instructor is Mark Van Benschoten, Rea & Associates Inc.
 McInnis motioned to assign 1.5 CECs, Byrd seconded. The vote was all in favor.
- o "Geology 101" one hour 30 minutes, December 10, 2009. The instructor is David L. Kill, Goulds Pumps. Daugherty motioned to assign 1.5 CECs, McInnis seconded. The vote was all in favor.
- "How to Keep Your Head Above Well Water" one hour 30 minutes,
 December 10, 2009. The instructor is Eric Koslowski, Environmental Testing & Research Laboratories. Byrd motioned to assign 1.5 CECs, Daugherty seconded. The vote was all in favor.
- "Planning for Disaster Means Planning for Survival" one hour 30 minutes, December 10, 2009. The instructor is Joseph J. Hogan, The Hartford Insurance Group. McInnis motioned to assign 1.5 CECs, Daugherty seconded. The vote was all in favor.
- o "Best Suggested Practices for Ground Water Testing" two (2) hours,

- **December 10, 2009.** The instructor is Jonathan Jenkins, NGWA. Daugherty motioned to assign **two (2) CECs,** Byrd seconded. The vote was all in favor.
- "High Capacity Pumps and Wells Interest Group Session" three (3) hours, December 10, 2009. The moderator is Don Harvard, Morrow Water Technologies Inc. McInnis motioned to assign 1.5 CECs, Byrd seconded. The vote was all in favor.
- o "How to Conduct an Effective Safety Meeting" one hour 30 minutes, December 10, 2009. The instructor is Joseph J. Hogan, The Hartford Insurance Group. McInnis motioned to assign 1.5 CECs in the safety/first aid/CPR category, Daugherty seconded. The vote was all in favor.
- o "Hydrogeology 101" one hour 30 minutes, December 10, 2009. The instructor is W. Richard Laton, California State University-Fullerton. McInnis motioned to assign 1.5 CECs, Daugherty seconded. The vote was all in favor.
- o "Planning for Profit: Contractors" one hour 30 minutes, December 10, 2009. The instructor is Albert Bates, The Profit Planning Group. Byrd motioned to assign 1.5 CECs, Daugherty seconded. The vote was all in favor.
- o "The Future of Private Wells: Challenges and Strategies" one hour 30 minutes, December 10, 2009. The instructor is Christine L. Reimer, NGWA. McInnis motioned to assign 1.5 CECs, Byrd seconded. The vote was all in favor.
- "The View Beneath Your Feet: Geophysics for Groundwater Studies" one hour 30 minutes, December 10, 2009. The instructor is John R. Jansen, ENTRIX. Daugherty motioned to assign 1.5 CECs, McInnis seconded. The vote was all in favor.
- "Best Suggested Practices for Minimizing or Dealing with Stray Gasses
 Entering a Water Well" two (2) hours, December 10, 2009. The instructor is
 Jonathan Jenkins, NGWA. McInnis motioned to assign two (2) CECs, Byrd
 seconded. The vote was all in favor.
- "Diverse Groundwater Topics" one (1) hour, December 10, 2009. The moderator is Matthew D. Machusick, SAIC. McInnis motioned to assign one (1) CEC, Daugherty seconded. The vote was all in favor.
- "Geothermal Drilling: How Proper Bit Selection Can Reduce Bit Cost per Foot" one hour 30 minutes, December 10, 2009. The instructor is Dick Palmer, Palmer Bit Co. Daugherty motioned to assign 1.5 CECs, McInnis seconded. The vote was all in favor.
- o "How ARRA May Affect Your Finances" one hour 30 minutes, December 10, 2009. The instructor is Mark Van Benschoten, Rea & Associates Inc. McInnis motioned to assign 1.5 CECs, Byrd seconded. The vote was all in favor.
- "How CARB Is Changing the Future of Equipment in the Groundwater Industry" one hour 30 minutes, December 10, 2009. The instructor is Daniel T. Meyer, Gregg Drilling & Testing Inc. Discussion: there aren't restrictions in Oregon; if it doesn't pertain to Oregon, should it apply? The Cont. Ed. Committee agreed it wouldn't. Byrd motioned not to assign CECs, Daugherty seconded. The vote was all in favor.
- o "Low-flow Sampling: How to Get the Best Sample" one hour 30 minutes,

- **December 10, 2009.** The instructor is Laura St. Pierre, YSI Inc. McInnis motioned to assign **1.5 CECs,** Daugherty seconded. The vote was all in favor.
- o "Submersible Pump Sizing and Variable Speed Drives: Getting the Most from Your System" one hour 30 minutes, December 10, 2009. The instructor is Steve Ulrich, Franklin Electric. Daugherty motioned to assign 0.5 CEC, McInnis seconded. The vote was all in favor.
- o "What's New from DOT?" one hour 30 minutes, December 10, 2009. The instructor is Gary LaBrake, On the Road. McInnis motioned to assign 1.5 CECs in the safety/first aid/CPR category, Byrd seconded. The vote was all in favor.
- o "Planning for Profit: Suppliers" one hour 30 minutes, December 10, 2009. The instructor is Albert Bates, The Profit Planning Group. McInnis motioned to assign 1.5 CECs, Daugherty seconded. The vote was all in favor.
- "Practical Water Well Rehabilitation and Maintenance" one hour 30 minutes, December 10, 2009. The instructor is Neil Mansuy, Subsurface Technologies Inc. Byrd motioned to assign 1.5 CECs, Daugherty seconded. The vote was all in favor.
- "Understanding IADC Codes for Tricone Bits" one hour 30 minutes,
 December 10, 2009. The instructor is Tim Thomas, Bit Brokers International.
 Daugherty motioned to assign 1.5 CECs, McInnis seconded. The vote was all in favor.
- o "Geothermal Interest Group Session" three (3) hours, December 10, 2009. The moderator is Todd Giddings, Todd Giddings and Associates Inc. McInnis motioned to assign three (3) CECs, Daugherty seconded. The vote was all in favor.
- o "Advanced Pressure Control and Pumping Protection Using VFDs" one hour 30 minutes, December 10, 2009. The instructor is Julian Atchia, SJE-Rhombus. Byrd motioned to assign 0.5 CEC, Daugherty seconded. The vote was all in favor.
- "Controlling Accident and Insurance Costs with Risk Management" one hour 30 minutes, December 10, 2009. The instructor is Joseph J. Hogan, The Hartford Insurance Group. Daugherty motioned to assign 1.5 CECs, McInnis seconded. The vote was all in favor.
- "Cost-Effective Tools for Investigations and Remedial Applications: Direct-Push Technology" one hour 30 minutes, December 10, 2009. The instructors are Bruce Manchon, Janeil Environmental Solutions and John Sciacca, URS Corp. McInnis motioned to assign 1.5 CECs, Byrd seconded. The vote was all in favor.
- o "What, Me Do Groundwater Public Awareness?" one hour 30 minutes, December 10, 2009. The instructor is Cliff Treyens, NGWA. Daugherty motioned to assign 1.5 CECs, McInnis seconded. The vote was all in favor.
- "Your Other Toolbox: Financial Statements Including the Profit and Loss Report" one hour 30 minutes, December 10, 2009. The instructor is Lawrence H. LaChance, Adirondack Pump & Well Service LLC. McInnis motioned to assign 1.5 CECs, Byrd seconded. The vote was all in favor.

- "Sand Pumping: The Real Story" one hour 30 minutes, December 10, 2009.
 The instructor is Sagi Rubin, Whitewater Well Ltd. McInnis motioned to assign 1.5 CECs, Daugherty seconded. The vote was all in favor.
- o "Reading the Road Ahead" one hour 30 minutes, December 10, 2009. The instructor is Joseph J. Hogan, The Hartford Insurance Group. Daugherty motioned to assign 1.5 CECs in the safety/first aid/CPR category, Byrd seconded. The vote was all in favor.
- "Smart Pumping: Future Trends in Pumping Control" one hour 30 minutes,
 December 10, 2009. The instructor is Sean Fitzpatrick, Schneider Electric.
 Daugherty motioned to assign 0.5 CEC, Byrd seconded. The vote was all in favor.
- "Understanding Well Problems: Coliform, Iron Bacteria, and Odors in Wells" one hour 30 minutes, December 10, 2009. The instructor is David T. Hanson, design Water Technologies. Byrd motioned to assign 1.5 CECs, Daugherty seconded. The vote was all in favor.
- "Using Google Earth for Groundwater Applications" one hour 30 minutes, December 10, 2009. The instructor is W. Richard Laton, California State University-Fullerton. McInnis motioned to assign 1.5 CECs, Daugherty seconded. The vote was all in favor.
- "Water Well Standards for Developing Countries II" one hour 30 minutes, December 10, 2009. The instructor is Steve Schneider, Schneider Equipment Inc. McInnis motioned to assign 1.5 CECs, Daugherty seconded. The vote was all in favor
- o "How State Associations Can Hold Outdoor Field Conferences and Public Outreach Events" one hour 30 minutes, December 11, 2009. The instructor is Todd Giddings, Todd Giddings and Associates Inc. Daugherty motioned to assign 1.5 CECs, McInnis seconded. The vote was all in favor.
- o "Drilling Fluids and Foams for Geothermal Applications" two (2) hours, December 11, 2009. The instructor is Stewart Krause, Wyo-Ben Inc. McInnis motioned to assign two (2) CECs, Byrd seconded. The vote was all in favor.
- "Low-flow Groundwater Sampling" two (2) hours, December 11, 2009. The instructor is Robert Mooney, In-Situ Inc. Daugherty motioned to assign two (2) CECs, McInnis seconded. The vote was all in favor.
- o "Preventable or Unpreventable?" two (2) hours, December 11, 2009. The instructor is Joseph J. Hogan, The Hartford Insurance Group. McInnis motioned to assign two (2) CECs in the safety/first aid/CPR category, Byrd seconded. The vote was all in favor.
- "The Boy Scout/Girl Scout Approach to a DOT Audit: Be Prepared" two (2) hours, December 11, 2009. The instructor is Gary LaBrake, On the Road. McInnis motioned to assign two (2) CECs, Byrd seconded. The vote was all in favor.
- "Troubleshooting Common Water System Problems" two (2) hours,
 December 11, 2009. The instructor is Mark Campbell, ITT Residential & Commercial Water. Daugherty motioned to assign one (1) CEC, Byrd seconded.

- The vote was all in favor.
- "Environmental Tracers in Modern Hydrogeology: Reducing Uncertainty in Ground Water Flow Estimation" Note: this is the 2009 NGWREF Darcy Lecture. One (1) hour, December 11, 2009. The instructor is Peter G. Cook, CSIRO Land and Water. McInnis motioned to assign one (1) CEC, Daugherty seconded. The vote was all in favor.
- o "Fall Protection and Working at Heights" one hour 30 minutes, December 11, 2009. The instructor is Lenny Lyons. McInnis motioned to assign 1.5 CECs in the safety/first aid/CPR category, Byrd seconded. The vote was all in favor.
- o "Surviving the Storms" two (2) hours, December 11, 2009. The instructor is Jim Davidson. McInnis motioned to assign two (2) CECs, Byrd seconded. The vote was all in favor.
- o "Best Suggested Practices for Water Well System Maintenance" two (2) hours, December 11, 2009. The instructor is Jonathan Jenkins, NGWA. McInnis motioned to assign two (2) CECs, Byrd seconded. The vote was all in favor.
- "Best Suggested Practices for Ground Water Sampling" two (2) hours,
 December 12, 2009. The instructor is Jonathan Jenkins, NGWA. Daugherty motioned to assign two (2) CECs, McInnis seconded. The vote was all in favor.
- "You Drill a Hole-You Develop a Well" Note: this is the 2010 NGWREF McEllhiney Lecture. One hour 30 minutes, December 12, 2009. The instructor is Mike Mehmert, Johnson Screens. McInnis motioned to assign 1.5 CECs, Daugherty seconded. The vote was all in favor.
- "Best Suggested Practices for Pump System Operation and Maintenance" one hour 30 minutes, December 12, 2009. The instructor is Jonathan Jenkins, NGWA. McInnis motioned to assign 0.5 CEC, Byrd seconded. The vote was all in favor.
- o "Applying the Principles of Cave Photography to Borehole Videos" one hour 30 minutes, December 13, 2009. The instructor is John M. Wilson, Marks Products Inc. McInnis motioned to assign 1.5 CECs, Daugherty seconded. The vote was all in favor.
- o "Geothermal Loop Installation" two (2) hours, December 13, 2009. The instructor is George M. Dugan, CETCO Drilling Products. McInnis motioned to assign two (2) CECs, Byrd seconded. The vote was all in favor.
- "Working in Developing Countries: The Experiences and Opportunities" three (3) hours, December 13, 2009. The moderator is Steve Schneider, Schneider Equipment Inc. McInnis motioned to assign three (3) CECs, Daugherty seconded. The vote was all in favor.
- o "Borehole Geophysical Logging for Water Resources/Water Supply Applications" four (4) hours, December 13, 2009. The instructors are Bruce Manchon, Janeil Environmental Solutions and John Sciacca, URS Corp. McInnis motioned to assign four (4) CECs, Byrd seconded. The vote was all in favor.
- "Fundamentals of Groundwater Hydrology, Hydrologic Tests, and Remediation Techniques" four (4) hours, December 13, 2009. The instructor is Shao-Chih "Ted" Way, In-Situ Inc. Daugherty motioned to assign four (4)

- **CECs,** McInnis seconded. The vote was all in favor.
- o "Vapor Intrusion" four (4) hours, December 13, 2009. The instructors are Robin Mongeon, NH Dept of Environmental Services and Bill Morris, EnviroGroup Ltd. McInnis motioned not to assign CEC, Byrd seconded. The vote was all in favor.
- o "Bidding and Estimating: Critical Tools for Effective Business Management" five (5) hours, December 13, 2009. The instructor is Gregg R. Corley, Clemson University. McInnis motioned to assign five (5) CECs, Byrd seconded. The vote was all in favor.
- "Using Digital Media Effectively to Document Your Projects" two hours 30 minutes, December 13, 2009. The instructor is David Wright, David Wright Photography. McInnis motioned to assign 2.5 CECs, Daugherty seconded. The vote was all in favor.
- o "Geothermal Loop Installation: Drilling Fluids and Thermally Enhanced Grouts" two (2) hours, December 13, 2009. The instructor is George M. Dugan CETCO Drilling Products. Byrd motioned to assign two (2) CECs, McInnis seconded. The vote was all in favor.
- o "General and Construction Estimating" one (1) hour, December 13, 2009. The instructor is Gregg R. Corley, Clemson University. Daugherty motioned to assign one (1) CEC, McInnis seconded. The vote was all in favor.
- "Panel: The Changes We Made to Weather the Recession" one (1) hour, December 13, 2009. The panel is Roger E. Renner, E.H. Renner & Sons Inc.; David C. Murman, Great Lakes Sales Co.; Andrew K. Adams, W&M Environmental Group Inc. McInnis motioned to assign one (1) CEC, Byrd seconded. The vote was all in favor.

The Cont. Ed. Committee reviewed the following course applications as part of the 2009 California Ground Water Association (CGA) 61st Annual Convention & Trade Show, scheduled for November 5-7, 2009, in Reno, Nevada:

- o "Drilling Fluids" two (2) hours, November 7, 2009. The instructor is Gary Williams, Baroid. Daugherty motioned to assign two (2) CECs, McInnis seconded. The vote was all in favor.
- o "Grundfos VFD Analysis" two (2) hours, November 6, 2009. The instructor is Larry Seitter, Grundfos Pumps Corp. Byrd motioned to assign one (1) CEC, Daugherty seconded. The vote was all in favor.
- "Water Treatment" two (2) hours, November 6, 2009. The instructors are Mike Mecca, Performance Water Products; Chubb Michaud, Systematix; and Ben Campanile, PACE Supply Corp. McInnis motioned to assign two (2) CECs, Daugherty seconded. The vote was all in favor.
- o "Safety Program" two (2) hours, November 6, 2009. The instructor is Joseph J. Hogan, The Hartford Insurance Group. McInnis motioned to assign two (2) CECs in the safety/first aid/CPR category, Byrd seconded. The vote was all in favor.

- o "Goulds VFD Analysis" two (2) hours, November 6, 2009. The instructor is Christian Bogan, Western Hydro. Daugherty motioned to assign one (1) CEC, Byrd seconded. The vote was all in favor.
- "Coliform & Iron Bacteria THE ANSWERS" seven (7) hours, November 5, 2009. The instructors are Dave Hanson, Design Water Technologies and Tim Guishard, Tim Guishard Enterprises. McInnis motioned to assign seven (7) CECs, Daugherty seconded. The vote was all in favor.
- "Ground Source Heat Pump Installation" seven (7) hours, November 5, 2009. The instructors are Jack Henrich, Bergerson-Caswell Inc and Jeff Blinn, Baroid. McInnis motioned to assign seven (7) CECs, Byrd seconded. The vote was all in favor.

The Cont. Ed. Committee reviewed the following course applications as part of the Washington State Ground Water Association (WSGWA) Fall 2009 CEU Seminar, scheduled for November 6, 2009, in Kelso, Washington (WA); November 20, 2009, in Spokane, WA; and November 21, 2009, in Pasco, WA:

- o "Casing Advancement Systems for Down Hole Hammers" one (1) hour. The instructor is Gary Barnett, Mitsubishi Materials. Daugherty motioned to assign one (1) CEC, McInnis seconded. The vote was all in favor.
- "Vertical Drilling of Surface Holes for Water Wells" one (1) hour. The instructor is Gerald Adcock, Adco Services. McInnis motioned to assign one (1)
 CEC, Byrd seconded. The vote was all in favor.
- o "Legislative Updates Rural Water & Domestic Well News" 30 minutes. The instructor is Glenn Smith, WSGWA. McInnis motioned to assign 0.5 CEC, Byrd seconded. The vote was all in favor.
- o "Industry Safety" two hours 30 minutes. The instructor is Bob Cooley, WA Dept of Labor and Industries. Daugherty motioned to assign 2.5 CECs in the safety/first aid/CPR category, Byrd seconded. The vote was all in favor.
- o "Pump Troubleshoot/Electrical Citations-Infractions". The instructor is Roger Chick. Byrd motioned to hold off assigning CECS on this course until further information is received (specifically confirmation of the timeframe of the course), McInnis seconded. The vote was all in favor.

D) Review of Documentation

Greg Farmer, #10560, submitted:

Documentation for a "OSHA 10 Hour Construction Program [2009 Rev 1]" class sponsored by Red Vector. This is an online course. Mr. Farmer took the course October 5, 2009. Each module is designed to take 50 minutes. The Cont. Ed. Committee agreed that all of the modules are in the safety/first aid/CPR category. They were assigned CEC as follows:

- o "Introduction to OSHA". McInnis motioned to assign one (1) CEC, Byrd seconded. The vote was all in favor.
- o "Electrical Safety". Daugherty motioned to assign one (1) CEC, McInnis

- seconded. The vote was all in favor.
- o "Fall Protection, Struck-By & Caught-Between Accidents". Byrd motioned to assign one (1) CEC, Daugherty seconded. The vote was all in favor.
- o "Personal Protective Equipment (PPE)". Daugherty motioned to assign one (1) CEC, McInnis seconded. The vote was all in favor.
- o "Scaffolds". McInnis motioned to assign one (1) CEC, Daugherty seconded. The vote was all in favor.
- o "Cranes". Byrd motioned to assign one (1) CEC, Daugherty seconded. The vote was all in favor.
- o "Power Tools". McInnis motioned to assign one (1) CEC, Daugherty seconded. The vote was all in favor.
- o "Excavations". Byrd motioned to assign one (1) CEC, Daugherty seconded. The vote was all in favor.
- o "Materials Storage". McInnis motioned to assign one (1) CEC, Daugherty seconded. The vote was all in favor.
- o "Demolition". McInnis motioned to assign one (1) CEC, Byrd seconded. The vote was all in favor.
- o "Hazards in Communication". Daugherty motioned to assign one (1) CEC, McInnis seconded. The vote was all in favor.
- E) Public Comment
- F) Future Meeting TBA

Adjourn