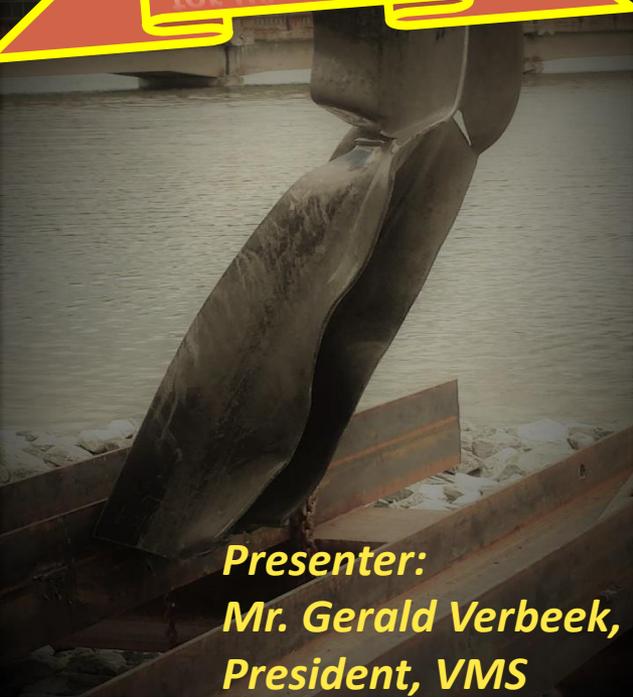


Earn 6 PDH's
for PA, NY & NJ



Presenter:
Mr. Gerald Verbeek,
President, VMS

NE Chapter of the PDCA
Educational Seminar
Pile driving
issues -
MythBusters
edition!

March 3, 2017



STRENGTHEN YOUR EMPLOYEES KNOWLEDGE OF THE PILE DRIVING INDUSTRY

This 1 day course covers:

Introduction to the theory of vibrations during pile driving, driving piles with a vibro hammer, soil fatigue using a vibro and impact pile driving hammer and steel pile damage assessment

A DRIVEN PILE IS A TESTED PILE! LEARN WHY!



About the 1 day Pile driving issues -MythBusters edition Course:

Presenter: Mr. Gerald Verbeek, President, VMS

The course provides an introductory look at the theory behind vibrations during pile driving and explains the logic behind the limits for vibration levels that are used in specifications for vibration monitoring. Additional topics cover driving piles with a vibro hammer and includes large diameter pipe piles and related case studies. The attendee will also hear about soil fatigue phenomenon during vibratory and impact pile driving sequences. Finally, our presentation will conclude with a discussion of steel pile damage assessment with two case studies, one from Vietnam and one from Boston. The goal of this course is to strengthen the student's knowledge of the advanced pile driving issues and geotechnical engineering tools to mitigate potential pile driving problems.

The course outline is as follows:

I. Vibration:

We will look at the theory behind vibrations during pile driving, explain the logic behind the limits for vibration levels that are used in specifications, and explain the European approach to vibration monitoring. The objective is to give the attendees an understanding of the potential vibration issue(s) that they can use in the discussion with clients and owners.

II. Vibratory pile driving:

We will look at driving piles with a vibro hammer. Following a description of a truly large diameter pipe pile (72 feet) that was driven with a vibro hammer, pile driving simulation, the selection of the vibro hammer as well as vibro driving analysis (the equivalent of PDA) are covered. As part of this discussion, soil fatigue (see below) will be addressed from a vibro driving point of view. These various parts of the presentation will be illustrated through a case study of a large (15 feet or so) open pipe pile for an offshore wind farm, and this case study will also address the bearing capacity of piles driven with a vibro hammer as well as the noise aspects during pile driving.

III. Soil fatigue:

While soil fatigue is readily recognized when it comes to pile driving with a vibro hammer, it is generally overlooked when it comes to pile driving with an impact hammer. In this segment the logic behind soil fatigue is addressed and various approaches to cover soil fatigue in pile driving simulations are discussed. These methods are then illustrated through a case study. The outcome of this case study will also point out that the soil model derived from the analysis of EOD data cannot be used as is for pile driving simulation purposes given how soil fatigue develops as the pile is driven into the ground.

IV. Steel pile damage assessment:

The last segment deals with a simple rule of thumb for potential steel pile damage that was originally developed by David Tara in Canada and that is being refined in recent years through an international effort. After explaining how this rule of thumb was developed its use will be illustrated through two case studies: one in Vietnam, the other in Boston.

About the venue:

The 1 day course will be held on Friday March 3, 2017 at the office of George Harms Construction Company:

62 Yellow Brook Rd, Howell, NJ 07731

8:30am to 4pm

Lunch & refreshments will be provided

This course is free for all NE Chapter PDCA and National PDCA membership

E-mail: apf@associatedpile.com to reserve your seat.

Pile Driving Professionals Development Course

Registration Form:

Name: _____

Company Name: _____

Telephone: (cell) _____

Email: _____

Years of knowledge in pile driving: _____

(Additional attendees from company on separate sheet please.)

6 PDH's will be awarded upon completion of the course for NY, NJ or PA



Not a PDCA Member? ... ask us how to join!