#### **Andy Howley**

Certified Geo-Exchange Designer No.201 AEE / IGSHPA IGSHPA Accredited Heat Pump Installer IGSHPA Accredited Vertical Loop Installer

Director of LoopMaster Europe Ltd

Chair of GSHPA Technical & Standards Sub-Committee

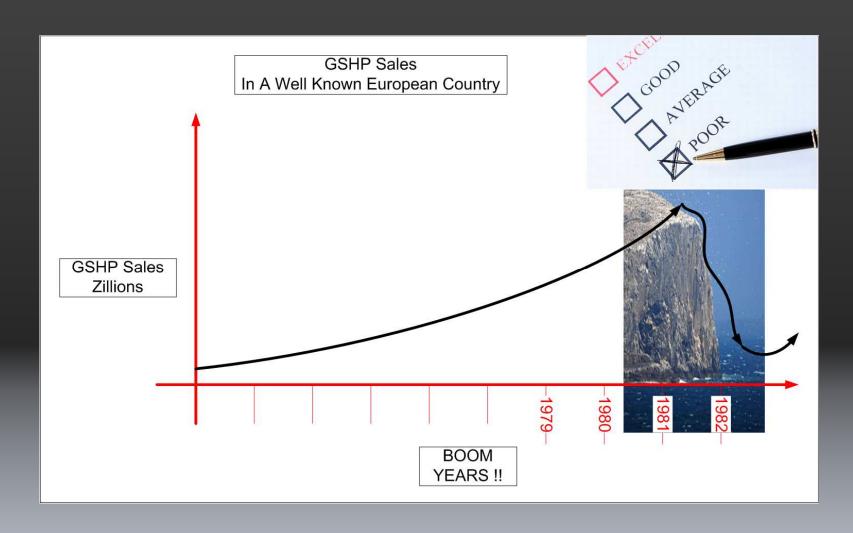
GSHPA AGM 26<sup>th</sup> June 2011



## The Subject Matter

- The need for standards and the benefit
- •The process employed to develop the standard
- The scope of the standards documents
- •The next steps in developing further standards
- •The work of the GSHPA Technical and Standard Sub-Committee





Low Consumer Confidence Burst this Bubble !!

**GROUND SOURCE HEAT PUMP ASSOCIATION** 



#### Blue PE 80 Pipe mixed with black pipes



**GROUND SOURCE HEAT PUMP ASSOCIATION** 



#### Very poor workmanship and site housekeeping



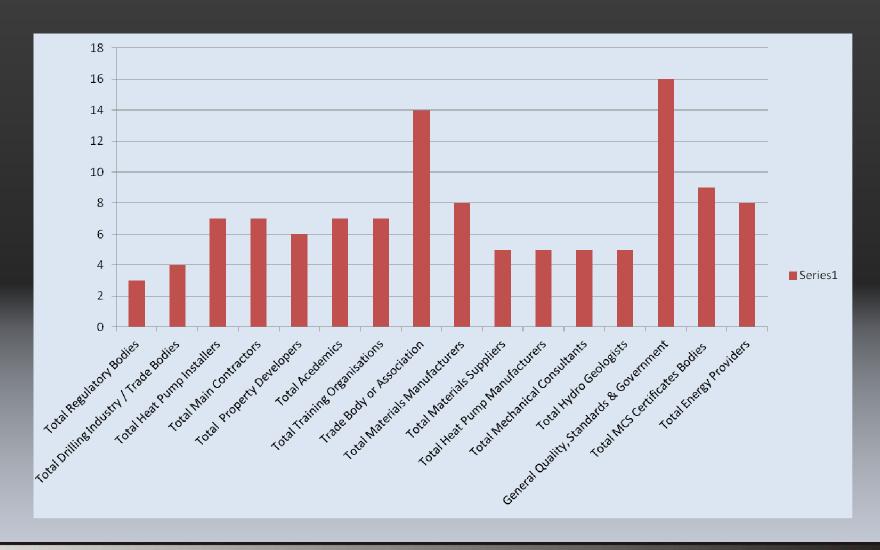


### The Standard Development Process

- First Draft produced and edited by T & SC and GSHPA Council
- Revised Draft produced and circulated to GSHPA Membership for consultation.
- Revised Draft produced and edited by T & SC and again circulated to GSHPA Council
- Revised Draft produced and edited by T & SC and issued to cross industry representatives
- Revised Draft produced and edited by T & SC and is now ready for issue in its current form.



#### The Consultees



**GROUND SOURCE HEAT PUMP ASSOCIATION** 



## The Scope of the Standards Document

The GSHPA standards are designed to be a concise document providing information for the materials and general specification of a closed-loop vertical borehole system. The standards also cover internal pipe works up to and including manifolds and / or flushing valves / arrangements. The standards do not include the building entry detail as these will be defined elsewhere. They are not designed to be an installation or training manual and the standards must be referred to in conjunction with recognised design qualifications and training programmes.

The Standards are designed so as to enable anybody reading them to quickly reference minimum materials specification, techniques and qualification requirements to be met and ensure that they either comply with the standards (or higher) or are employing companies and personnel who do comply with the standards (or higher).



## Basically...

To allow anybody such as drillers, ground workers architects, designer, specification writers, installers, end users, building operators etc etc etc to be able to assess and ensure that the minimum materials standards are being asked for, provided or being adhered to...

They are not to outline how to design a system, they are not for Mrs Jones to vet or verify that the thermal transfer fluid is correct...

They are not to prove how many holes are needed, how to drill a hole or how to install a heat pump system.



## What does everybody get with standards in place?

The standards need to be a requirement!

The organisations now in the industry need to be trend setters for the newcomers and fully adopt the standards.



## Standards Help Avoid This Problem





# Next Steps in Standards Horizontal Standards





# Next Steps in Standards Geothermal Pile Standards





## Other On-Going T & SC Works

- Training, Qualification & Certification
- MCS Revisions
- British Drilling Association Certification Scheme
- Technical Seminar being Planned for Oct / Nov 2011
- Work on standards just beginning as amendments, new materials and innovation will continue



## Other Key Industry Initiatives

- Environment Agency Good Practice Guide
- British Drilling Association Certification Scheme



### The result of T & SC Work?

To ensure that we don't have a consumer confidence lapse

To ensure there is a level playing field for everybody, clients, specifiers, contractors, designers installers etc

A sustainable growing industry where newcomers have to reach minimum standards from day one to be able to participate



### The Thank You!

Thanks go to all of T & SC for their time and enormous efforts that have gone into producing the standards.

Brian Stringer – British Drilling Association

Richard Freeborn - Kensa Heat Pumps

Nic Wincott

Neo-Energy

Duncan Nicholson – Arup

Jake Salisbury – GSHPA

David Mathews – GSHPA



## Thank you for listening

Andy Howley – CGD No.201 IGSHPA / AEE LoopMaster Europe

