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***Training and Standards; how the industry is
responding to meets the demand generated by
the RHI***

On-Going Work of T & SC



Sub-Committee Members

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Standards and why do we need them with Rhi looming ?

- **Route to consumer confidence;**
- **Ensure that systems work as expected;**
- **Reduce call backs to poor performing systems;**
- **Protect the environment from poor materials and practices leading to leaks in systems, possible groundwater contamination, etc;**
- **Better understanding from specifiers and consultants in making the correct choices;**
- **Create a level playing field as new installers enter the market.**



Is there currently an issue with poor standards ?

You bet there is !!!

The next few slides are just a small sample of shots from sites showing questionable working practices or in some cases downright madness



The good old tree planter strikes again !!



Not me guv !!



**Not the best bit of headering ever seen !!
Imagine the flush pump needed to get rocks out !!**



Clamps.....Who needs em !!



Hmmm.....I wonder if this will fit in the pipe sticking out of the ground ??



How many welds does one loop need !!!



Oops, even the loop manufacturer doesn't bother with clamps. Good job the driller pressure tested it.

BUT.....It failed the test quite convincingly !!!



Ground Loop Installation – Far East Style !!





A Sub-Aqua TRT !!!

**M/C forgot to switch on the surface
water drainage pumps !!**

**M/C's works were unaffected,
so that's OK then !!**





**Same site, same
problem !!**

**When standards are in
place, all parties are
responsible and if the
M/C decides to step
outside the standards
then they could be in the
firing line with the loss
adjusters as well !!!!**





The best until last !!

This driller's idea of a tremmie pipe involves one about 300 mm sticking out of the grout pump. They didn't even bother to poke a bit down the hole !!



Where are T & SC with the GSHPA standards ??

- Re-drafted following the members consultation
- Detailed work with materials suppliers and manufacturers
- Draft now being subject to external consultation
- External organisations include EA, CIBSE, HSE, BDA, Consultants and specifiers.



Timescales ??

- Consultation issue by 1st week in July
- Consultation Responses by 1st week in August
- Publication by 1st week in September



Our aspirations for the standards

- The document will be free to members and also specifying consultants;
- The aim is to have the standards referenced in CIBSE publications, EA guidance, BDA guidance and also performance specifications for vertical borehole installations etc.
- We hope the GSHPA has the most up to date and relevant set of standards in Europe and will be continually developed as new products are developed.



The on-going work for T & SC?

- **Horizontal Standards**
- **Pond & Lake Standards**
- **Geothermal Foundation Pile Standards**
- **Open Loop Standards**
- **Design Standards**



Thank you for listening

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