

'Managing the Risk of Metal Theft'



Paul Playford
Risk Services Consultant at
Ecclesiastical Insurance

and

**Gary Higgins
& Steve Lloyd of
Smartwater Technology**



Paul began by explaining that his work involves him specifically with church related theft. His organisation, Ecclesiastical Insurance, works very closely with 'Smartwater', and uses their technology in the fight against metal theft.

Paul went on to show us a short DVD clip which was produced last year by one of the Welsh authorities, Rhondda Cynon Taf and which highlights the issues around metal theft and its victims.

Metal Theft – Financial Impact:

Paul told us that in 2009 the estimated impact of metal theft on the UK economy was £770m. Insurers report that metal theft is costing the industry £1m pw.



Paul reported that he started to see 'real' increases in 2007 and there have been almost 12,000 claims since that time. On average, 7 churches are targeted each day.

Often the thieves return a second, third, and fourth time (once the lead has been replaced). The extent of the damage is not always apparent, often causing extensive 'hidden' internal damage.

Churches in rural locations, pose particular problems because there may be no-one to hear an alarm.

Despite this, Ecclesiastical Insurance has looked into roof alarms particularly for churches. Paul commented that he sees roof alarms as being the ultimate deterrent in many cases.

A 'Hands Off Our Church Roof' Campaign began using Smartwater signs. Signs are widely regarded as an effective deterrent.

Ecclesiastical Insurance came up with a multi-pronged strategy including:

- SmartWater
- Roof alarms
- Education and guidance
- Self-assessment form
- Support and advice
- Participation in external initiatives
- Appointment of Metal Liaison Representative

Paul said that making sure that there is joined up thinking, is a key part of his role. Ecclesiastical Insurance produced some simple guidance and advice:

- Remove sources of easy access to roofs (e.g. wheelie bins)
- Store ladders in a secure places
- Scaffolding – provides *very* easy access to roofs!
- Limit vehicle access
- Engage with neighbours
- Anti-climb paint
- Regular checks on roofs

Paul reported that 2011 was the worst year on record for metal theft however, there was a drop in 2012 and the current trend seems to be downwards. Why? The initiatives listed above and also the introduction of new legislation e.g. the Sentencing and Punishment of Offenders Act which created a new criminal offence prohibiting scrap dealers from paying in cash for scrap metal, and the Scrap Metal Dealers Act which introduced a licensing scheme making all scrap metal accounted for. Paul added that it would be dangerous for us to take our 'eye off the ball' because the demand for metal will continue. Major international building projects are being planned such as a 26.4 miles long sea bridge (the longest in the World), which will take 4 years to build and another bridge to be built in Singapore which will be even longer. Profit from metal theft is high and so thieves will always find an outlet for their 'goods'. Legislation is in place and has to be enforced. There needs to be greater partnership working with the Port Authorities and HMRC.

Paul then handed over to Steve Lloyd, Regional Client Support Manager at SmartWater Technology Ltd., and his colleague Gary Higgins.

Steve told us that Smartwater has been at the forefront of the battle against metal theft for some years. The Company opened for business in 1996. Both Steve and Gary are ex-police officers and work closely with the police in their current role. Steve commented that the crims detest anything to do with forensic evidence.

What is Smartwater?

Smartwater is a substance that is based on non-hazardous substances. It

- Is a water based solution - Code + **Fluorescence** + Polymer
- Has a unique forensic code 31 Rare Metal Compounds
- Is invisible to naked eye - **GREEN / YELLOW** under UV light
- Can be analysed down to a billionth part, (Pin Head)



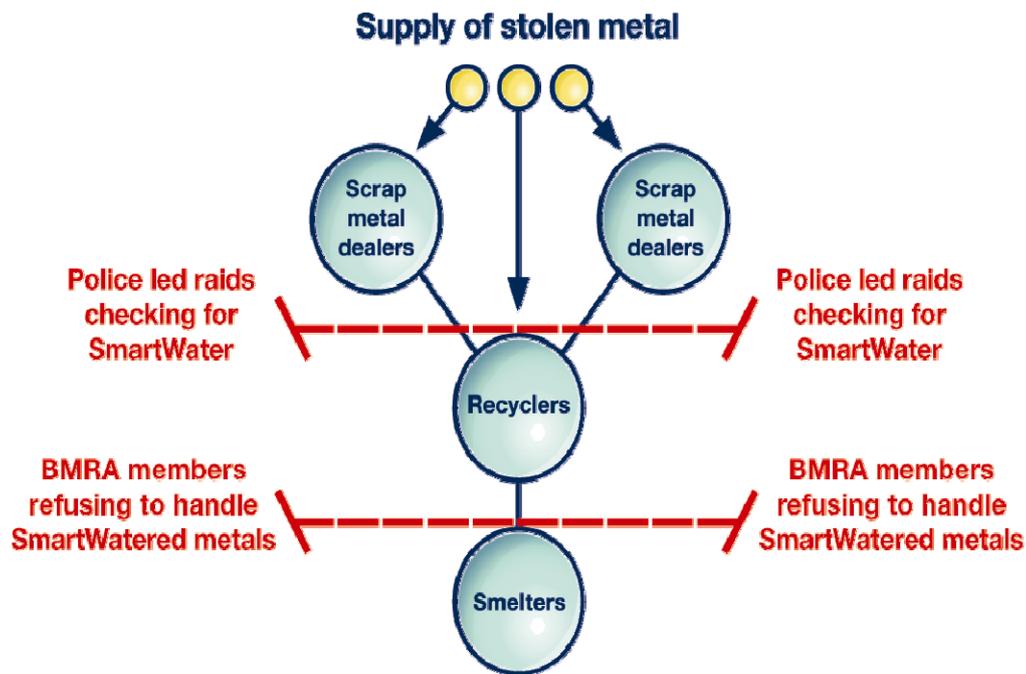
Because it contains polymer (glue) Smartwater has excellent adhesive qualities, and although it is invisible to the naked eye, it is fluorescent and can be seen under UV light. Smartwater is a water/metal oxide based and therefore appropriate for external use. The water base means that the solution can seep into nooks and crannies. An amount equivalent to a pin head is all that is needed to identify the application and match it

to the appropriate property / equipment. The solution can be applied to anything from jewellery to a drain cover.

Each application has a unique DNA (forensic code) which is applied to the property/materials/equipment. The forensic code is entered onto the Smartwater secure database. Steve advised us that Smartwater is more robust than DNA.

If the solution gets onto the skin, it will stay there between 4 and 6 weeks. It stays on clothing for ever. When applied to property/materials, Smartwater will last a minimum of 5 years. It is applied most effectively as a spray and Steve mentioned that during the riots in 2011, Smartwater solution was not found because signs had been installed where the solution had been sprayed and the buildings/property were avoided by the rioters.

National Metal Theft Strategy



Steve noted that the ‘message’ is getting out to the criminals, largely because of the strategy adopted in conjunction with the Police. Moreover, Smartwater is working with the ‘genuine’ scrap dealers who want to deal with scrap but not with stolen goods.

What Support does Smartwater offer Clients?

The Smartwater Client Support Unit (CSU) offers:

- Free training
- Free Support (CSU)
- Free Forensic Analysis
- Free Expert Testimony at Court

How is Smartwater Applied to Lead and Stonework?

Steve told us that it is mostly applied by brush but sometimes a pumped spray application is used. It can be used in an industrial setting. Network Rail, Tata Steel and Western Power (who have problems with thieves cutting cables) are all working with Smartwater. Other examples of places (on a smaller scale) where Smartwater can be effectively used include homes and allotments. Steve added that where they are dealing with an application on a listed premise, there are sometimes restrictions due to a requirement to replace like with like, e.g. lead has to be replaced with lead.

What About Contractors Brought in to Carry Out Roof Repairs?

When contractors are brought in following the theft of metal on roofs, the contractors need to be advised about the application of Smartwater and how to reapply. Paul commented earlier that often contractors carrying out roof work are immigrants and sometimes perceived as dispensable labour. This of course will introduce other hazards associated with metal theft.

What If I Sell My Jewellery?

If Smartwater has been applied to jewellery, let the purchaser know that Smartwater has been applied and let Smartwater know that the jewellery is being sold on.

The Smartwater Torch:

How easy is it to replace? Steve said that it is a simple UV torch that costs around £200. Thieves have been apprehended who were carrying one of the UV torches. Following a query about the UV radiation and frequency, Steve said that the frequency of the torch has to be the 'right' frequency otherwise the evidence won't be visible.

What is Planned for the Future?



- Random roadside searches – Scrap Metal Dealer Visits
- 'We don't buy SmartWater' campaign
- Media and press campaign
- Honey Trap Operations i.e. intelligence led forensic traps



Tim thanked Paul, Steve and Gary for their excellent presentations, and asked Members to show their appreciation in the usual way.

Steve Parton would like to refer Members to the following web links with regard to mainly local metal theft issues:

<http://www.bbc.co.uk/news/uk-england-20039510>

<http://www.bbc.co.uk/news/uk-wales-south-east-wales-22110980>

<http://www.expressandstar.com/news/2013/04/04/metal-thief-suspect-caught-down-manhole/>

<http://www.bbc.co.uk/news/uk-england-20343837>

<http://m.west-midlands.police.uk/latest-news/press-release.asp?id=4564>