

Gwyn Winfield looks at the recent suspected malathion attack in Afghanistan

Is this it?

There is a certain amount of religiosity about CBRNE; responders, academics and legislators all wait "the coming" with faith, and like all other faith-based movements there is a question of whether this is it? Has "it" occurred yet; has the moment come? While at the FPED show in DC I was talking to a young CBRN officer who had lost the "faith": "I don't think an attack is ever going to occur; we do all this training, we get all this equipment, but nothing happens and nothing will," he said. On Wednesday 13 May, in Kapisa province in Afghanistan, there were 90 young schoolgirls who would have disagreed.

The full reported story can be found in the UK's *The Independent* newspaper (<http://www.independent.co.uk/news/world/asia/girls-targeted-in-taliban-gas-attack-1684028.html>), but effectively these are the stated facts. As the girls were lining up for assembly at the Mahmud Raqi village, one girl collapsed unconscious. Others also collapsed and started vomiting, and five girls went briefly into a coma. While six teachers and two other staff were also admitted to hospital, most victims were between eight and 12. A 13-year-old student suggested the smell resembled that of Mallatin, a local agricultural pesticide. This is part of a campaign of aggression against female students, days before another school in Charikar was also attacked and there has been a systematic use of acid and other devices to terrify schoolgirls, and women generally – the Taliban are against the education of women. There is little information on how the agent was applied/disseminated. Local police informed *The Independent* that this attack was made by insurgents hired by the ISI – Pakistan's intelligence agency – though this has been denied by President Karzai.

What else is known? Some of the girls commented about a sweet and

pleasant smell, which is also symptomatic of Mallatin, which is sweetened with syrup. That Mallatin is a trade name for Malathion, an organophosphate (OP) that has killed before – five died during a malaria spraying operation in Pakistan in 1976. Malathion is an EPA compound with Class III toxicity – large doses are required to cause the symptoms shown in the majority of the school girls and extremely high doses are needed to cause a coma. Experiments in rats show female rats are more susceptible than males, that it goes through photolysis and becomes more toxic as a reaction to sunlight and also becomes more toxic if stored for more than three months and if the storage temperature increases (thanks to an increase in one of Malathion's impurities – OSS-TMP).

Malathion as a thioform of OP does not inhibit acetylcholinesterase in vitro, and as such is difficult to detect with chemical detectors that work on the inhibition principle. Mallatin can be bought over the counter, without any problems, in major cities in Afghanistan and, as a largely agrarian country, can be bought in the large amounts needed to cause the symptoms without any concern. Mallatin, also released under the name Killer-57E, contains about 50 per cent Malathion. This is, of course, if it was indeed Mallatin as there has been no official statement.

Indeed, post-13 May, the story gets more confused. Following Karzai's statement that the ISI wasn't involved there was a local story that the injuries had been caused by a gas leak and then by a case of food poisoning. The food poisoning is a complete red herring; the chances of nearly a hundred people being affected by food poisoning in Afghanistan is not unlikely, and neither is hospitalisation and closeness of death – but for all 100 odd people to

be affected at the same time? Equally, while my experience of Afghanistan is limited to the major cities and I have not visited Mahmud Raqi, I find it hard to believe that such a provincial school in Afghanistan has piped gas – meaning any gas is likely to come from either propane or butane tanks, which don't smell like Mallatin. Neither would anyone be likely to sit in the plume until they went into coma. Admittedly circumstantial evidence, but none of this is pointing to the current explanation. A "sample" was taken to a US Operation Enduring Freedom (it is not an ISAF "problem") lab and (again apparently as there has been no official comment) the result was inconclusive as the sample was not "good enough". Meanwhile, someone has (apparently) been arrested for this non-attack. The lead agency for this is the Afghan Interior Ministry. Zmary Bashary, the Spokesman for the Ministry, told us the investigation was ongoing and no firm conclusion had been made. Some individuals had been arrested, but he could not confirm how many, neither was he sure what gas (if it was indeed a gas) was used – there was no possibility for detection on the scene as the police do not have the necessary equipment – and that blood samples have been sent off to government labs to try and ascertain the cause. He wanted to impress on me that they were doing everything that they could to try and find out the cause and prosecute the guilty.

This is what CBRN attacks look like! Why are insurgent forces going to attack Coalition forces with less lethal technology – which is all the lower grade chemical weapons will be. Instead, they will attack the unprepared population with large concentrations of over-the-counter chemicals. Any response is unlikely to find anything conclusive thanks to



The Taliban have been attacking schoolgirls as 'unIslamic', could it be Malathion? ©DoD

the distances involved and the small number of trained personnel. CBRN incidents are happening; they may not be announced by a shaft of light or a burning bush, but they are ongoing – ten poisoned with thallium in Iraq in 2008, the anthrax letters in 2001, the chlorine attacks in 2007 (and beyond), the polonium 210 murder in London, sarin attacks in Tokyo in 1995, the April 2007 attacks on horse racing in Hong Kong. What links all these together? Nothing.

Different actors, different agents, different agendas – CBRN weapons are means to an end, and if they come with the added oxygen of publicity then so much the better.

If *The Independent's* Jerome Starkey is to be believed, this latest attack is just one in a line of incidents in which Afghan insurgents have attacked schoolgirls with chemicals. Like terrorists anywhere they will use the most common, but effective, tools to do their job – if squirting acid into

faces, or gassing, works they will use that – and until there is an effective deterrent or countermeasure they will continue to use them. CBRN responders, both military and civilian, must stop waiting for the big scenarios – the Cold War or 9/11. In the same way that not every conflict is the Second World War or every robbery the Brinks Mat case, small is likely to be the order of the day, leavened every now and then by a spectacular. Prepare for the worst; expect Mahmud Raqi.