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Chemical 'time bomb' threat

Patrick Walter, 12/10/2009

As many as 7m people in Ukraine and Moldova are being put at risk by poor storage of a stockpile of the chemical hexachlorobenzene (HCB), the International HCH and Pesticides Association (IHPA) has warned. The IHPA director, John Vijgen, spotted the chemical 'time bomb' while examining *Google Earth* maps. Vijgen noticed that the landfill site holding more than 10,000 t of the chemical was dangerously close to a tributary of the Dniester river.

Vijgen says that the Kalush factory in the west of Ukraine is only one serious flood away from releasing HCB into the watercourse of the Dniester, the main source of drinking water for Moldova.

HCB is highly toxic to aquatic life, and the International Agency for Research on Cancer has listed it as a potential human carcinogen. It was formerly used as a fungicidal seed treatment agent, but is now banned under the Stockholm Convention on Persistent Organic Pollutants. In one infamous case in Turkey, between 1955 and 1959, more than 500 people died after eating bread made from wheat seed treated with HCB.

The Kalush site is only extraordinary in the Ukraine for the size of the pesticide stockpile. According to Ukrainian figures, there are 4500 sites across Ukraine holding more than 30,000 t of obsolete pesticides. All together, across Eastern Europe, Russia and the former Soviet Union countries, as much as 263,500 t of obsolete pesticides are thought to exist.

Vijgen says that a large part of the problem is obtaining accurate information on these stockpiles. 'The real issue is countries sometimes have a lot of numbers but if you don't go into the field you don't know what's really out there. In many of the former Soviet Union Republics, some data are 20 years old.' He adds that, as recently as 2003, Ukraine estimated its obsolete pesticide stockpiles as 10,000 t – a third of up-to-date estimates.

The trouble is that economic development always takes priority over these kinds of environmental problems, Vijgen says. 'I talk to environment ministers and they don't have the means to act.'

He says that it is much cheaper for countries to attack the problem now rather than respond to contamination events. The IHPA estimates the cost of cleaning up all 263,500 t of obsolete pesticides at around €800m. By contrast, the 2002 food scandal in Germany, where chicken feed was contaminated with the illegal pesticide nitrofen, cost the country about €500m.

But Vijgen says that this problem is not insurmountable. 'It's very simple to tackle the problem, but it's not sexy,' he says. The IHPA and its Dutch partners Milieukontakt International and Tauw, train people to track down obsolete pesticide stockpiles, so that they can be stabilised and repackaged for destruction. Poland has already cleaned up 10,000 t of obsolete pesticides with its own funds, he adds. 'You have to be the boss in your own house; you have to take responsibility for the problem yourself.'

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