

Medical waste... a bloody mess

Clinical waste must be handled with care, but a *WME* investigation found no such thing. Garth Lamb dissects an industry in uproar and regulators sitting idle.

Waste management ranks a long way down the list of concerns for any front line health professional busily saving lives. Just like sick waste workers should be able to trust their doctor knows what to do, and will do it well, doctors should be able to trust that their waste providers appropriately treat their wastes.



But lax environmental regulators and penny-pinching health departments are letting them down. A *WME* investigation has found clinical waste generators kept in the dark and some of the most unpleasant and potentially dangerous items – including used syringes, pathology samples, body parts, cytotoxic waste, pharmaceuticals and laboratory cultures – spirited across the nation and potentially fed through inappropriate treatment processes.

Relatively low volumes and extreme complexity are two factors that help shield the sector from regulatory scrutiny. Hugh Parsons from Sweeney Todd Waste Disposal claims general indifference from regulators is allowing fly-by-night operators to undermine legitimate companies. He cited a recent example where medical waste was found strewn on the side of a busy Melbourne road and reported to EPA Victoria – which did not deem it necessary to investigate the incident.

“It’s a symptom of the way the industry is running at the moment, with the lack of control and regulations, and lack of policing,” said Parsons.

Occasional illegal dumping is just the ugly tip of the iceberg. The underlying problem is rooted in the history of clinical waste management. For a long time incineration, which can safely destroy all clinical and related wastes, was the only disposal point, but other treatment options have emerged during the past 15 years. Regulators have failed to keep pace with the shifting landscape.

The bevy of cheaper alternative technologies includes autoclave sterilisation and various chemical treatment processes, which have operational costs of \$0.20/kg compared to \$0.80/kg for incinerators.

These technologies can generally handle sharps, which make up the bulk of the waste stream, but they are not suitable for all materials.

Regulators know this and it is reflected in various guidelines, but they have dropped the ball when it comes to ensuring the community can have confidence the guidelines are followed.

Incinerator business

Victoria's *Clinical and Related Waste Operational Guidance* clearly states, "if a waste stream is contaminated with human tissue waste or pharmaceuticals, all waste will require incineration". But given difficulties auditing dangerous material inside enclosed medical waste containers, there are legitimate questions as to how well this is (or can be) enforced.

Victoria's newest incinerator is a state-of-the-art \$10 million facility built by Ace Waste to replace an old incinerator that operated on the same Dandenong South site since 1987.

On July 24, Transpacific Cleanaway informed Ace managing director John Homewood his contract to destroy about 40 tonnes of waste a week would be terminated on August 22. That's commercially disastrous for Ace, but then building the facility without an airtight volume agreement wasn't Homewood's brightest moment. That's business.

SteriHealth (formerly SteriCorp) now holds the contract and has two disposal options in Melbourne – one incinerator and a newer "alternative treatment" plant that shreds and chemically sterilises material. Its director of strategic development, Michael Magyar, told *WME* about 15 per cent of all waste it treats in Melbourne is incinerated, with the other 85 per cent – the yellow sharps bins – fed through the chemical plant.

The problem with this is that changing 20-30 per cent of Melbourne's clinical waste to a different primary treatment potentially requires major adjustments to how generators sort their wastes. These changes are hard to make when most customers are kept in the dark, and some actively misled.

Generators in the dark

WME has seen a letter dated August 4 and sent by MediWaste – an operating division of Transpacific – to an existing customer, confirming "the Dandenong medical waste facility

operates under EPA Licence Number EM36133 and accepts the primary licensed waste streams for incineration”.

That's the Ace facility and licence, but its contract had been cancelled 11 days before. Homewood has referred the incident to the Australian Competition and Consumer Commission.

It is not an isolated example of, at the very least, incompetence. In a ring-around of some other Transpacific customers at funeral homes and medical clinics, none of the smaller operators WME contacted had any idea the bulk of their waste is no longer incinerated, although key staff at the large Peter MacCallum Institute had been advised.

Magyar claims SteriHealth educates all its direct customers on how to properly separate various components of the waste stream so no human tissue, cytotoxic material, pharmaceutical or chemical wastes end up in bins destined for chemical treatment. Education is followed up by internal audits, which he says have always found “both the customers and the transporters comply – they follow the regulations impeccably”.

SteriHealth doesn't deal directly with the Melbourne generators in question but EPA Victoria's director of environmental services, Bruce Dawson, said ongoing auditing and assessment of the facility in question does back up the company's claim.

Given widespread generator confusion about where their waste is headed, however, compliance seems more a case of good luck than good management. Despite this, and in spite of the fact most environmental agencies are increasingly aiming for a holistic approach to waste management, Dawson says the EPA only licenses the treatment plant, not the individual generators.

Magyar too is unconcerned about whether generators know their disposal point, so long as they continue to sort properly.

“So long as it is then being treated to the particular requirements of that regulated area, it makes no difference to the customer. Why would they care?” he said.

It's a line that frustrates Homewood, who points out that after a long history of everything being incinerated, and without generators receiving notification of any changes, it seems ridiculously lax of the regulator to assume only approved materials escape incineration.

There's nothing wrong with SteriHealth and Cleanaway outcompeting competitors to win work, but the high-risk game of clinical waste management needs strong enforcement of the

rules to keep things on a safe, level playing field. And it's not just Victoria's EPA that seems to have forgotten this.

Regulators losing their grip?

Clinical waste management is apparently so unimportant to the NSW Health Department that it hasn't bothered preparing to re-tender its services in time for a smooth transition when its seven-year contracts expire on November 30.

Contracts are even more loosely adhered to in WA, where the Department of Environment previously stated sharps must be incinerated locally, but now turns a blind eye to SteriHealth transporting clinical waste for chemical treatment in Victoria.

Magyar lays out a variety of arguments why alternative treatments are more environmentally and economically sound than "old technology" incineration, and this is a legitimate debate. The point is that regulators should agree to changes before they happen – and until they do should actually enforce their own guidelines.

EPA Victoria's *Movement of Controlled Waste into Victoria* guidelines state, "Where practicable, wastes should be treated or disposed of in the state of origin". Dawson argues it is up to WA regulators to determine "practicable", and so long as the waste is properly transported and disposed in a licensed facility, he is largely unconcerned which state it came from.

Both EPAs have been grilled by SteriHealth's competitors about why they would allow hazardous material to be transported across the country when SITA has an incinerator in Perth. Similar frustration about cross-border leakage is also unfolding in SA.

The reason is clearly the cheaper treatment in Victoria. But as SITA's exasperated Jennifer Bensemann points out, the role of an environmental regulator is to ensure the community is presented as low a safety risk as possible, not to secure the best prices for health departments.

Conflict runs deep

Deakin University's independent expert Trevor Thornton sees "a big problem" with the potential conflict of interest arising through health departments being both the biggest users of clinical waste services and also key advisers on how the system should be run.

While the relationship is not formalised, Thornton argues regulators look to other government experts for advice, and "if the health department says it, that's the way the EPA is going to go".

“Even if the health department had all honourable intentions, they’ve still got to think about the cost factor, and that’s going to come through in their decision-making.”

He cites an example where Queensland’s definition of clinical waste shifted from items having “visible blood” to being “blood soaked”, without explanation.

“You have a waste reclassified, with no rationale provided, that results in less waste coming from the hospitals... That may be a fair decision, but you’ve got to be open and transparent about it.”

The shifting landscape and poor policing is clearly frustrating companies trying to abide by the rules, but Thornton also sees potential for generators to end up being prosecuted if something does go wrong anywhere along the disposal chain.

“The EPAs say as the generator you have ultimate responsibility, and yet in some instances, EPAs are saying it doesn’t really matter if the transporter doesn’t tell you what’s happening. So how is the generator supposed to know what’s going on?”

When the rulebook can be ignored, rather than debated and re-written, can anyone have confidence in what’s going on?