



STAFF REPORT

TO: Environment & Planning Committee

FROM: Jenny Easton, Resource Scientist - Contaminants

REFERENCE: W112

SUBJECT: **REDUNDANT AGRICHEMICAL COLLECTION AND DISPOSAL –
REPORT EP08/08/02** - Report prepared for meeting of 28 August

1. INTRODUCTION

1.1 Regulations

Under the RMA one of Council's functions is to prevent or mitigate adverse effects from the storage, use and disposal of hazardous substances. The landowner also has that responsibility, but redundant agrichemicals are costly to collect and dispose of. In the past we have undertaken to assist the landowner to protect the districts environment from inappropriate disposal in dumps or waterways.

Persistent Organic Pesticides (POPs) are a type of hazardous substance dealt with under the 2004 Stockholm Convention on POPs to which New Zealand is a signatory. Under this Convention the Ministry for Environment (MfE) has been working with councils to assist in removing POPs from the environment. They have a target of no more than 5 tonnes per region by 2010. POPs require disposal overseas.

There is another subset of hazardous substances which are not POPs but are intractable agrichemicals that can not be disposed of in NZ landfills, and they have to go with the POPs overseas for High Temperature Incineration. (*This report uses the term POPs for brevity to cover all the chemicals that have to go overseas for disposal*)

This report seeks support to continue with the identification, removal and destruction of these hazardous wastes.

1.2 1996 / 1997

In 1996 / 1997 TDC carried out a district wide collection of redundant agrichemicals from 500 farms. We collected 17 tonnes, which included 10 tonnes of POPs such as DDT, lindane, dieldrin and other organochlorine pesticides which were sent overseas for High Temperature Incineration (HTI). Council paid \$50,000 for that destruction as part of a Regional Council consortium.

1.3 2006

Ministry for the Environment funded the disposal of POPs received from regional councils, however it limited both the level of contribution and the period with which it would engage with the councils. This was the funding source to which we applied for funding to carry out the 2007 collection. We obtained funding for 3.4 tonnes. Our funding tonnage request was based on our successful collection 10 years previously and the expectation that most farmers would comply with EUREPGAP audits and therefore not have redundant chemicals on their farms.

1.4 May / June 2007

Once Council had the funding secured a letter was sent to farmers inviting them to participate in another collection. We received an overwhelming response which indicated that there was an estimated 13 tonnes needing to be recovered. Additionally we advertised an urban collection service using four (Hazmobile) drop off days (Murchison, Takaka, Motueka and Richmond). We received an over whelming response from these days and collected 5.5 tonnes of POPs, (as well as 22 tonnes of other hazardous waste including; oil, paint and lead-acid batteries).

Due to the 'success' of the urban collections we had to stop the farm collections early leaving 214 farms with their waste uncollected, these farms retain approximately 10 tonnes of material for removal. At this stage the 9 tonne storage capacity we maintained at Eves Valley was full and we were not able to source extra funding from central government for additional destruction of waste. We therefore contacted those farms holding uncollected waste and asked them to store their redundant agrichemicals safely until we have the budget to collect and dispose of it again or other means of disposal were found. We did not have storage space ourselves and we could not accept the liability for the hazardous waste until we were able to ensure its storage and disposal.

1.5 Household Hazardous Waste

In 2001 we negotiated an arrangement with Nelson City Council for our householders to use the facility at NCC's Pascoe Street Refuse Transfer Station for the reception and temporary storage of household hazardous waste. This was necessary for safety reasons as our Refuse Transfer Station staff were not qualified to receive and store Hazwaste and we do not want to maintain several remote storage facilities with their associated risks. NCC requires our ratepayers to obtain a manifest signed by myself (or Rob Smith in my absence) and will not accept the waste unless they have this. This is to protect the receiving staff from the risk and liability of storing dangerous chemicals such as fumigants, leaking containers and oxidising agents.

The householder is required to deliver and pay for the receipt of the hazwaste, the same rule applies for Nelson ratepayers. The fee is set as a sliding scale based on weight (free under 2 kg, \$5.00 for 2-9 kg and \$2.00 per kg for loads over 9 kg). This waste is labelled as TDC and stored in a small shed until the Hazwaste contractor transports it to our hazchem sheds beside Eves Valley Landfill.

Unlike the farm redundant agrichemicals most of the household hazwaste is not POPs and can be disposed of after treatment in New Zealand landfills at \$2.00/kg. We receive about 0.5 tonnes of POP waste from households annually, and this needs to be disposed of along with the material collected from the farms.

1.6 Storage of Hazardous Waste

Council has three modified shipping containers on a bunded area at the base of the Eves Valley Landfill. These were installed in 1994 specifically for redundant agrichemical collection and storage. We use a specialist hazwaste contractor to transport, pack, store and manifest these chemicals 'on farm', or the TDC derived material at Pascoe Street, because once we collect the waste we assume the risk and responsibility from the landowner for its safe storage and disposal. Powders and liquids need repacking every five years because the chemicals typically destroy the plastic containers after this period of time. Therefore there is a liability and cost of even storing POPs. So far we have managed to do this safely without fire or serious discharge which some other council's facilities have had to cope with.

1.7 Future Estimates of POPs

POPs are not being manufactured or sold any more, so there is a finite quantity out in the farms and garden sheds. However, we (and other regional councils) have not been able to estimate when the collections can stop. As each time a collection is undertaken in the various regions more POPs turn up. The quantity of POPs per farm is estimated now to be 10 kg more than ten years ago (now 46 kg/farm).

It is apparent that not all farmers responded to the invitation to participate in the collection in 1996 / 1997. When surveyed during the 2007 collection many farmers said they inherited the chemicals with the farm or that they were away during the last collection.

It appears that generally farmers underestimate by about half the quantity they have, and also when the hazwaste contractor goes to the farm they can identify other redundant agrichemicals stored on site. Both the underestimate and the additional 'finds' lead to the recovery of more than expected waste material. Finding additional POPs is one reason why we collect at the farm, the other reason is that it is safer to repack from unlabelled or from broken containers on site.

2. CURRENT SITUATION

2.1 Collections of POPs

- a) The Household Hazardous Waste will continue to come through the (convenient) arrangement we have with the NCC transfer station, and we expect 0.5 tonnes POPs a year, for the next decade at least.
- b) Farms. We prefer to pick up from the farms, for safety and thoroughness. They could not take their waste to NCC's transfer station and overload this small facility. Currently we have 214 farms waiting for collection in the Waimea-Richmond area. (Golden Bay and Murchison-Tapawera were collected from in 2007).

It is desired that in order to stop the reoccurrence of excess hazardous material being stored at our Eves Valley site or remaining on farms that after this last 'clean sweep' collection we offer a system where any remaining farmers can register their waste for collection with us and we will organise our contractor to collect every one to two years depending on demand.

Over the last 12 years we have collected 13 tonnes and have another 10 tonnes waiting to be collected, so based on this we might expect about 2 tonnes of POPs a year to come in via this "casual registration" system, for the next decade at least.

2.2 Funding

2.2.1 Current

We have \$100,000 available this financial year (2008/2009) to dispose of the 9 tonnes of POPs we have stored in our hazwaste sheds at Eves Valley. (This 9 tonnes is made up of 5.5 tonnes from the 2007 urban collection and 3.5 tonnes from the last six years of the Household hazardous waste).

2.2.2 Possible Government Funding

We have received some MfE funding for earlier collections but, in spite of trying, we (and other councils) can not get additional funding. There will be an attempt to get funding from the Waste Minimisation Bills waste levy as one of the priority wastes, or as part of Producer / Stewardship Responsibility with a levy on modern agrichemicals, but if either of these strategies are successful funding would still be at least five years away and most likely more than that, if ever.

2.2.3 Proposed Funding for Farm Collection

In 2007 we paid for the \$7.00/kg it costs our contractor to collect from farms and the government paid the \$3.00/kg to pack and freight and the \$9.00/kg ex Auckland to dispose of POPs. Now we that have no access to government funding we need to review how this is paid for.

The free collection for farmers is inconsistent with the urban ratepayer who undertakes the delivery of their hazwaste, and pays \$2.00/kg for storage (for loads over 2 kg).

This Report proposes that the farmers pay for the collection of the hazwaste based on \$9.00/per kg (\$7.00/kg to collect plus \$2.00/kg to store). The hazwaste contractor weighs the chemicals for his manifest and council will be able to charge based on that data. The travel distance to farms will vary but the time packing the chemicals is the same, and the weight is simpler for charging. For the average farm collection of 46 kg the cost will be \$414.00. The Council would then pick up the cost of disposal, again being consistent with the household system.

Benefits

There will be a consistent policy across urban and rural sectors. This change would almost halve the cost to the general ratepayer of the farm agrichemical collection and

POP disposal. That is it will cost \$120,000 to dispose of the 10 tonnes of POPs waiting on the farms not \$200,000.

Disadvantages

Farmers may restrict the amount of POP waste they submit for collection. We hope that there is enough increased awareness of the adverse environmental consequences from POPs, and the need for farmers to protect the environment that this will not be a significant disadvantage.

2.2.4 Predicted Cost of Disposal of Intractable Hazwaste

In 2007 the cost of disposal to High Temperature Incineration facilities overseas was \$9.00/kg ex Auckland. However the rising cost of fuel and energy has increased that by 10% (July 2008) and with more increases expected it would be prudent not to delay the 10 tonne farm pick up and disposal for more than two years. An additional factor is that the company that undertakes this cartage work under BASEL convention licence has just been taken over by an overseas company and this is predicted to also cause the price to rise.

The cost to collect, pack into plastic lined drums and freight to an export wharf is also going to rise with fuel costs and inflation.

3. RECOMMENDATIONS

1. That Council sets a charge for hazwaste collection of \$9.00/kg for on-farm pick ups.
2. That Council retains the budget item of \$140,000 in 2009/2010 budget to dispose of the 10 tonnes we can collect from the 214 farmers.
3. That Council continues the Household Hazardous Waste collection and storage system with Nelson City Council.
4. That after the 214 listed farms have been cleared, Council provides a registration system for farmers and undertakes to pick up the waste from enrolled farmers at least every two years. With budget being provided via the LTCCP process, starting at \$30,000 for the 2010/2011 financial year.

Jenny Easton
Resource Scientist - Contaminants